

ECHO IRELAND

IRISH RADIO TRANSMITTERS SOCIETY

Winter 2018 - 86 YEARS



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A Seasonal message from our President ...

Tempus fugit... Already we find ourselves at the end of another year and looking forward to a new one. In September our amateur radio community lost one of our finest and long-standing members, Seán Nolan EI7CD. An Honorary Past President of IRTS, Seán was a great friend to many and a very erudite and knowledgeable individual. His tremendous competence in liaising with ComReg on Frequency Spectrum Allocations coupled with his work on the Licence Examination Syllabus was a testament to his great ability and **commitment**. Ar dheis Dé go raibh a anam dílis.

As President and an active amateur radio operator I am very encouraged by the level of activity generated on the bands by Irish groups and individuals in 2018. In April the EI0DXG Group activated 7Q7EI in Malawi. Consequently Enda EI2II and Declan EI9HQ were head-hunted to operate the first European FT8 Fox Dxpedition in Kosovo.

EI0DXG activated five offshore Islands culminating in a massively successful DXFéile on Aran Mór. Dave EI9FBB activated the newly created IOTA Vieques Island NA-249 followed immediately by Kosovo Z6 with Jeremy EI5GM. Padraic EI5IX joined the A35EU Group late in November to activate Tonga. Several clubs and individuals activated a number of commemorative call signs such as EI100MCV and EI100SSD. My sincere thank goes to you all for your hard work and enthusiasm in flying the flag of amateur radio both nationally and internationally.

In the 2018 Summer Edition of Echo Ireland IRTS was delighted to announce the introduction of additional frequencies for use by the amateur radio community. Subsequently, IRTS submitted a document to ComReg entitled “Response to the Consultation on ComReg Draft Radio Spectrum management Strategy 2019 – 2021”. This work is

being done on foot of a note from the IARU encouraging the lobbying of Regulators in CEPT countries in respect to next year’s WRC-19 conference. Dave EI3IO as Chairman of the “Spectrum and Regulatory Liaison Committee” of the IARU has been

hugely involved in this process. On behalf of the IRTS and its members I would like to extend our gratitude to him for all his hard work.

As ever, amateur radio continues to push out the boundaries of technology. In 2018 we have seen the growth and development of the FT8 mode and DMR, and currently a new geostationary amateur radio satellite Es’HAIL 2 is available for the first time. In the words of the IARU, amateur radio is “the greatest of all scientific hobbies”. Long may we continue to be pioneers for our great hobby!

On a personal note I would like to say thanks to all of the society officers, committee members, sub-committees and the various managers, including the QSL managers whose workload never seems to abate. I would particularly like to thank those who compile and edit our news and publications. The production values and print quality of our Echo Ireland magazine is on a par with the best. We owe you a sincere debt of gratitude.

Finally I want to take this opportunity to wish all our members a happy and peaceful Christmas and a prosperous New Year.

Nollaig shona is Athbhliain faoi mhaise daoibh go léir.

Jim Holohan EI4HH
President IRTS



Front Cover

Top - the Z66X DXpedition to Kosovo.
Bottom - the 7Q7EI DXpedition to Malawi.
[Missing from photo is Driton Z61DX]

News from around the Clubs

Dundalk Amateur Radio Society

Brian Whelan EI8EJB

The new DARS year commenced following our AGM traditionally held in early May and with the new committee comprising of Kieran EI9DA (President), Hugh EI9KF (Chairman), Brian EI8EJB (Secretary), Jim EI2HJB (Treasurer), Thos EI2JD (P.R.O.), Sean EI4IP (QSL Manager), Ivan EI1166 (Caretaker) a full year's activities were planned out. DARS have two meetings per month, a business-type formal meeting on the first Wednesday each month and a radio activity night on the third Wednesday. The club station is activated on HF (80m through 10m) and VHF from Marconi House, our club-owned house, during these meetings and each member has been allocated a night during the year where they can give a talk about a chosen subject or indeed give a demo on a project that they have been working on. This has been a great success to date and has sparked off a new lease of life or direction for members attending the talks.

We had two very welcome visitors to DARS in September. After contacting the club via the club website, Phil KD2XN and Don KA2PAG paid a visit to one of our meetings. It was a great night and both were made very welcome indeed. On their way to the club, Phil operated EI/KD2XN on 2m and exchanged QSL cards on arrival. Quickest confirmation yet!! We are still in touch with them after Phil, Don and their wives returned to New York state.

As many centenary commemorations are taking place around the country regarding the ending of WW1, locals in Dundalk have been remembering the sinking of the S.S. Dundalk which occurred when a German U-boat sunk the ship just south of the Isle of Man in October 1918. Following consultations with the official organisers of the S.S. Dundalk Memorial events, DARS applied for a licence EI100SSD which has been put on air by members and, on the actual anniversary date, we set up a station using the EI100SSD callsign at the Dundalk Museum where a wonderful

exhibition on the S.S. Dundalk had opened. Members of the public stopped by to find out what the station was all about. The Wee County is now serviced by EI2CCR, the analogue 2m voice repeater giving very wide area coverage of the north east, and more recently, EI4FMG, our 70 MHz Echolink gateway, was put back on air after an overhaul and is now giving omnidirectional coverage of the greater North East on 4m from the middle of the county.

Our 2m Echolink gateway, EI2MOG, should be also back in service by the time this edition of Echo Ireland goes to print which has always given great blanket coverage of the North East. Our UHF MMDVM repeater, EI7DKD software has all been tested successfully and we are looking forward to getting this on air from a site in the north of the county and is designed to give coverage well to the south and south west.

Many thanks to Richard MI3CQR for all his technical know-how for the maintenance of the RF hardware and of the revamped club website at www.ei7dar.com. Our DARS Facebook page is continually updated and you can always get something of interest there also.

Again, by the time you read this, we should have had our Christmas party, with the traditional manufacturing of the EI2JD chip-butties and EI2HX mince-pies and custard!

Wishing everyone a very Happy Christmas and a peaceful 2019 from DARS



Thos EI2JD, Alain EI2KM /F8FUA, Seamus EI3KE, Doug EI2CN, Adrian EI2KJ



DARS G5RV W.I.P.



KD2XN & KA2PAG visit DARS

IECRO Ireland (EI0IPN)

Mark Bannon EI6HPB

Over the past twelve months IECRO Ireland has been working closely with the committee of IECRO UK to create a number of cross-border initiatives. More information shall follow later in the next issue of Echo Ireland about some of these, however for the purposes of this article we will review the projects underway now in EI.

Services due for installation in 2019 by IECRO Ireland

Analogue FM and Digital Voice Gateways

EI2SNG will provide worldwide analogue communications via both AllStar and EchoLink. One of the advantages for the introduction of this service within the midlands (“lakelands”) region, is for maritime-mobile operation purposes. It will be useful for ham radio licensees who possess an interest in having a radio with them while either out fishing or sailing on inland waterways.

This gateway will cover the full length of the rivers Brosna and Suck, in addition to many other secondary waterways suitable for low draft vessel navigation.

Coverage also includes the Shannon, from roughly above the north exit of Lough Derg near Portumna to the southern entry point of Lough Allen at Drumshanbo.

Jamestown Canal: Full distance from Ardanaffrin to Cloonteen, including Albert Lock.

Several sections of the Grand Canal should have good coverage.

The Royal Canal Greenway/Royal Canal:

Coverage should be about 100km of the total 145.6km royal canal length.

- Dublin City, Leixlip, Maynooth, Kilcock (Limited, poor or no coverage)
- Enfield (beginning of strong reception)
- Hill of Down
- Thomastown/Killucan
- Mullingar
- Ballynacargy
- Abbeyshrule
- Ballymahon
- Longford (includes entire longford branch)
- Kenagh
- Killashee
- Cloondara (termination of royal canal)

A number of tests have been carried out using the EI2SNG gateway station equipment. Several of these assessments involved Shannon Basin Radio Club Net participants. Almost all operators on the net were clear 59 signals coming through to the gateway station.

There is always room for additional improvement when it comes to gateways, repeaters and other such systems. Further work will be conducted over the coming weeks in terms of reducing line loss and implementation of high speed telecommunication/network services on site.

Concurrent development is underway for the midlands digital voice gateway. EI7SND will be a multi-mode DV system providing service for users of C4FM/Fusion, DMR and possibly even D-Star. This MMDVM gateway will be connected via Brandmeister.

Combined Analogue and DMR Repeater

A repeater will be established in Mullingar which will operate on both FM and DMR. Callsign EI7SNR. Frequencies will be 430.7MHz input and 439.7MHz output.

Being on the 70cm band it will be more for “localised” usage (surrounding counties). Please be aware that only one mode will be able to operate at any time through the repeater, thus care should be exercised at all times so as not to block the usage of other users. If DMR is in operation however, it will act virtually as a “double repeater” as both TS1 and TS2 can allow for separate discussions to take place simultaneously.

Parrot Network

What if you would like additional distance above and beyond the coverage of EI7SNR? ... Introducing EI0SNR and EI4SNR.

IECRO is keen to encourage increased usage of the 4m (70MHz) and 10m bands. As such, two parrot/simplexers operating on these bands will be linked together to form a cross-band mini parrot network.

The 2m gateway mentioned above will be able to temporarily through user requests connect/disconnect to the 4m parrot as and when required, thus providing RF and AllStar/EchoLink users to access all of the parrots too.

What does this mean for the ham community? Well it means the following dramatic improvements in terms of FM range across the middle of the country from East to West:

- 4m - 4m
- 4m - 10m
- 10m - 10m
- 2m - both linked parrots
(plus Allstar and Echolink services)

Below is a list of the towns and villages which should receive various levels of coverage as a result of the combined parrot linked network:

Abbeyleix, Athboy, Athlone, Bailieborough, Ballaghaderreen, Ballinamallard, Ballinamore, Ballinasloe, Ballinteer, Ballybay, Ballyboden, Ballyconnell, Ballyhaunis, Ballyjamesduff, Ballymacash, Ballymahon, Baltinglass, Banagher, Belturbet, Birr, Blanchardstown, Blessington, Borrisokane, Boyle, Cahir, Carrickmacross, Carrick-on-Shannon, Cashel, Castlecomer, Castlepollard, Castlereagh, Cavan, Clane, Clara, Claremorris, Cloghan, Clones, Clondalkin, Cloughjordan, Collooney, Cootehill, Rock of Cashel, Delvin, Drogheda, Drumshanbo, Dunboyne, Dundrum, Dunshaughlin, Durrow, Edenderry, Elphin, Enfield, Enniskillen, Glenavy, Granard, Howth, Irvinestown, Kells, Kilbeggan, Kilcock, Kilcormac, Kilkenny, Kinnegad, Knock, Letterbreen, Lisbellaw, Lisnaskea, Lisnarick, Longford, Loughrea, Lucan, Malahide, Maynooth, Moate, Mountbellew, Mullingar, Naas, Newbridge, Newtownforbes, Oughterard, Palmerstown, Port Laoise, Portumna, Rathdowney, Roscrea, Roscommon, Sallins, Sandyford, Shercock, Strokestown, Tallaght, Templemore, Thurles,

Tipperary, Tobercurry, Trim, Tuam, Tullamore, Urlingford, Virginia, Wicklow

Data Packet Services

EI7SNP is a 70cm combined Packet Repeater, BBS and Gateway. This UHF automated system will provide a number of interesting services including news, weather reports and email access.

IECRO is passionate about promoting the increased usage of packet radio on the 70cm band. During 2019 the IECRO club will actively promote all aspects of packet radio to encourage both current and future licensed operators to consider using this mode a little more often.

Deployment Timeline

The aim will be to have some of these systems on the air within the coming weeks and months.

As there is no mains electricity supply on-site for any of these stations, they will all have to be powered by environmentally friendly solar/wind, which comes with costs associated in terms of purchasing and maintaining solar panels, power banks and charge control units.

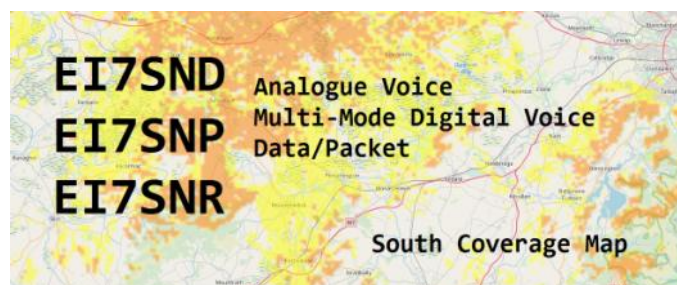
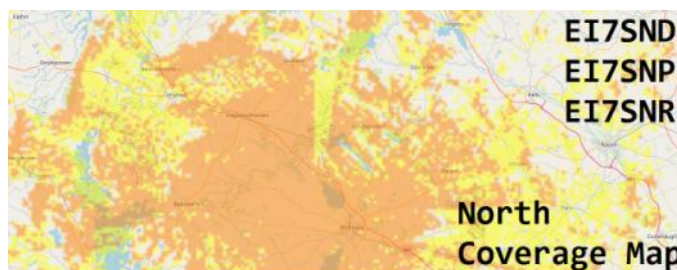
If any amateurs wish to donate in some way (financial or old equipment) towards the implementation and maintenance of these services, it would be greatly appreciated. Equally help in terms of provision of skills or an additional pair of hands for a few hours some evening, would greatly improve our changes of bringing these services onto the air in a more timely fashion.

License Examination Classes

First of all, IECRO Ireland Radio Club would like to congratulate all of the recently licensed operators whom were trained by the club over the past few months. We look forward to having you attend our meetings now as full members.

Training classes will start again in the IECRO Ireland club after Christmas for anyone who would like to sit the HAREC assessment Summer 2019. We hope to arrange for an examination hall for the midlands if numbers are large enough. There is already a list of applicants and if we can increase the number a bit higher the examination centre could become a possibility.

Additional information about any of the above services can be obtained by visiting www.iecro.com, emailing info.iecro@gmail.com or by contacting Mark EI6HPB via telephone 086 355 2370.



Echo coverage (from top) of 2m, 2m-maritime, 4m, 70cm-north, 70cm-south

What's my WAI Square?

During the recent 40m Counties Contest, a number of contesters were asked which Worked All Ireland square they were operating in, which led to some enquiries about the WAI Awards Scheme. WAI squares are based on 10km x 10km squares within the Irish Grid Reference system, and are identified by a letter followed by two numbers, followed by the name of the county, e.g. **S71 Wexford**.

The Irish Grid Reference system uses a letter to identify 100km x 100km squares, then a number of digits representing the easting and a number of digits representing the northing. The WAI square uses the letter, the first easting digit and the first northing digit. On the WAI Awards Scheme web page www.irts.ie/wai we have included links to sites that can identify the grid reference of any location in Ireland. There are plenty of apps available for phones to show your current reference: for example, "All-In-One Offline Maps" can be set to display both the grid reference and Maidenhead square - perfect for /P operators!

Shannon Basin Radio Club

Brian Canning EI8IU

The Shannon Basin Radio Club had a busy summer with contests, outings and several members attending the EI DX Group DX Feile on the Aran Islands,

SSB Field Day

The club took part in the SSB Field day, once again located in the grounds of Garbally College in Ballinasloe. We were very lucky with the weather as the sun was shining for most of the day which of course helped when erecting antenna and the gazebo (thanks to Tom EI4HCB).

Band conditions were fair and a steady QSO rate was possible. The contest also gave recently-licensed Paul (EI9HQB) his first taste of contesting and he coped very well with some of the pile ups.

Ops on the day were Pat EI9HX, Fergus EI6IB, Fr Niall EI4CF, Tom EI4HCB, Paul EI9HQB, Owen EI4GGB, Craig EI3FW, Anthony EI6GGB and Brian EI8IU.



Pat EI9HX operating during "Field" Day

2 Metre & 70 cm Contest

We headed for our usual spot on the top of Cairn Hill in Co. Longford and again were blessed with the good weather. A lot of the forestation had been cleared and the views were fantastic. It was the first time we tried the 70 cms contest and the outcome of that was that we need a better antenna for next year! Our furthest QSO was with Hugh EI2HI in Cork which wasn't too bad.

2m was better and we had QSOs from throughout the island. Our antenna worked well and we won the High Power FM/SSB section.

Ops were Craig EI3FW, Fergus EI6IB and Brian EI8IU.

Lough Rynn Harvest Festival

After speaking with the organisers who were delighted to have our hobby promoted at their festival, plans were put in place to set up a HF station at the festival on Sunday 23rd September. The location was in the fantastic grounds of Lough Rynn Castle Hotel, just outside of Mohill in Co. Leitrim.

We arrived at about 07:30 to be confronted by a long queue of traders and exhibitors who were there before us. After a while the queue started moving and we were eventually shown to our temporary QTH which was in an open area beside Lough Rynn. With trees nearby we weren't long in getting our inverted vee ready and again our accommodation was Tom's EI4HQB gazebo.

We got the Icom IC7400 up and running and the antenna worked well. We had lots of visitors throughout the day, with CW demonstrations for the kids and adults alike. All the kids who tried CW received personalised certificates of achievement. There was also lots of interest again from young and old and a lot of the IRTS information brochures were given out. We also had a visit from a local TD who tried his hand at the mike (being a politician talking was no bother to him!) and a wise old owl dropped in too, (he didn't say too much). Who says that Ham Radio is an owl lads hobby!!

Over all, it was a successful outing where we got to promote the hobby we all enjoy so much. And for next years...bigger and better.



Club members, Visitors to the SBRC station at Lough Rynn, Martin Kenny TD on the mike

Skerries Radio Club

Pat Fitzpatrick EI2HX

The Skerries Radio Club has moved into a new Clubhouse, the Skerries Sailing Club.

For the first few weeks it was a case of using the sailing club's long-abandoned marine aerial that got us out on 2m. So as we wanted our own aerials a couple of meetings with the sailing club's committee followed, with one meeting involving us having to bring the proposed aerials to the meetings so they could have a look at them. After a few days we received approval from the sailing club, and then it was down to settings a day and time with both parties for the location and installation of an aerial or two.

Club members donated to the good cause, some of their time, surplus equipment. The club had enough to enable to install a dual-band for 2m and 70cms, a HF vertical and a half-size G5RV, not forgetting the coaxial cable, connectors various clamps, brackets and ropes needed to complete the job, all freely donated.

The Skerries Radio Club meets every Tuesday from 19:30 hours until 22:00 and has just started Morse classes, so come along!



John EI8BX, Austin EI3HS, Pat EI2HX, Frank EI8HIB.



Your Society Needs You!

To ensure continued publication of *Echo Ireland* an Editor is urgently required

Contact Jim EI4HH

Tipperary Amateur Radio Group

Ronan Daly EI4KN

On the 1st & 2nd of September Tipperary Amateur Radio Group were QRV at Mooncoin, Co. Kilkenny for the 24-hour HF SSB Field Day. The station was manned by Paul EI3ENB, Tommy EI2IT, Hugh EI2HI, Ronan EI4KN, Francis EI5GOB, John EI7IG, Andy EI5JF, Martin EI2HIB, Michael EI9GGB, Brian Kelly SWL & Jim O'Brien SWL. An enjoyable weekend was had by all and the club achieved second place in the open section with 87,668 points.

Hugh EI2HI was the winner of the SSB/FM High Power Fixed section in the recent 70cms Counties Contest held on the 9th September.

Paul EI3ENB was the winner of the SSB/FM Low Power Fixed section of the 2m contest held on the same day. Hugh EI2HI was the leading EI station in the SSB/FM High Power Fixed section with Ronan EI4KN in 3rd place. Several club members were also active for the 40m Counties Contest held on the 14th October.

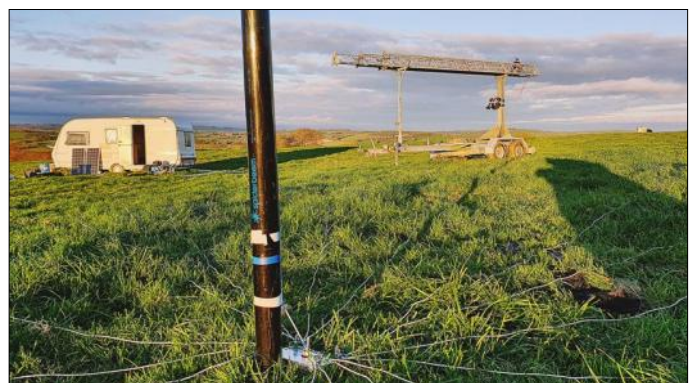
A meeting of the group took place in The Park Hotel, Clonmel on Thursday 18th October. The meeting was well attended and a variety of topics were discussed.

Club member Olivier ON4EI/EI8GQB was back again in Ireland to operate as EI7T during the CQ WW DX SSB contest which took place on the 27th and 28th October. However he was unable to take part due to a computer crash at the beginning of contest, causing him to lose everything he had prepared for the occasion.

The day after, he also paid a 4-hour unexpected visit to emergency at the local Clonmel hospital late at night, thinking he was suffering from a heart attack. But his heart was in good condition. The extreme unease he was feeling actually monoxide poisoning caused by the caravan heater despite having alarm equipment to protect against such events. *[A salutary warning/lesson for all—Editor]*

It took him three days to fully recover. He dismantled the temporary antenna park - which he never really used. He spent five days to raise it and three days to remove it, for no show.

The only positive souvenir from his 2018 radio activity is this picture and maybe new ideas, as in every crisis there is opportunity!



Mayo Radio Experimenters Network

Dominic Curtin EI9JS

Meetings

The club's AGM was held on the first Wednesday evening in October. A new team of officials was elected for 2019. These are as follows:

Chairman – John McDonnell, EI6IR
Treasurer – Padraic Baynes EI9JA
Secretary – Brendan Minish EI6IZ
PRO – Dominic Curtin EI9JS
Club IRTS Rep – Dominic Curtin EI9JS
QSL Manager – Brendan Minish EI6IZ

On the same evening we had a surprise visit from a Canadian amateur, VE7AWV, Frank Eichel from Surrey, British Columbia, who was holidaying in Ireland and staying nearby. He joined in on a lively debate about the new bands, especially the 8m band which was a hot topic on the night; we also had a discussion on the use of DMR radios and hot-spots. A very interesting evening was had by all that attended.

October 40m Counties Contest

The sun was shining, the torrential rain had stopped. Cabin fever had struck so a club away mission was planned; ringing around the Saturday evening before the contest, the usual crew was resurrected!

Padraic EI9JA, Jimmy EI2GCB and Dominic EI9JS plus the dogs arrived at a location agreed to on the evening before. A station was assembled and EI7MRE/P was set up and ready for the start time of 12.00 noon with plenty of time... We started at 12.00. The only problem was it was local and not UTC!

First mistake of the day - should have paid more attention to the small print. A second attempt was made at the correct time; now all the familiar stations were on air!

A new issue we had was a persistent RF hash from the generator on the low bands. This is a problem that would have to be addressed before the next outing. When the equipment was got home and examined it was found that one of the patch leads had a faulty screen. This may have been the problem but more testing is required.

Even though we are at a very low part of the solar cycle there was a good turnout on the band. The band conditions closed early so we didn't run until the end. It was early home on this occasion! Many thanks to all that made it into the log and all those active throughout the event.

Club members travelled to Limavady to the Bushvalley ARC Rally on 4th November 2018. A large number of people from across the north of the country attended the rally. A lot of wheeling, dealing and swapping of radios and electronic pieces took place!

40 MHz - 8 Metre Band - First contact on 8 Metres!!

With the advent of the 8m band being opened up for amateur use, some club members had discussed how they could operate on this band. Brendan EI6IZ did some tests with his FT817; it tuned up to 32MHz from the 10m section and down to 32MHz through 40MHz from the 6m section. This made

the FT 817 usable for the new 8m band.

Dominic EI9JS thought that if the FT 817 can, then its bigger brother the FT857 would. Guess what? It does. Dominic's Yaesu FT857 was put on some test equipment; it proved to be ok on TX with 2nd harmonic at least 60db lower and 3rd harmonic non-existent on the equipment available, so now there are some readily available radios to use on the new band.

Phil EI9KP (ON4TA) was back in Ireland at his new accommodation, he was keen to do some test on this new allocated band! The only known activity on the band is the Denmark beacon on 40.071MHz. Phil's only radio for the band was a Vertex PMR, which was programmed for the band but only on 47MHz FM. Phil also owned a FT857 which he uses for SOTA activation. On hearing about Dominic's success with his FT857, Phil EI9KP converted his own FT857 to operate on the band.

Antennas were the next, and a wire dipole was constructed for the first test on 47Mhz, with a contact made on FM.

Dominic EI9JS fitted a more substantial dipole cut for the suggested part of the band on the tower at his QTH.

The first real 2-way contact on the 8m band was made between Dominic EI9JS and Phil EI9KP on 40.250 MHz SSB on the 19th October 2018 at 20.29 UTC.

Phil EI9KP also has constructed a Delta Loop for the band. THESE ANTENNAS ARE BIG!

While Phil EI9KP is in Ireland he will run a personal beacon on 40.150 MHz using his FT857 from his QTH for propagation purposes.



Padraic EI9JA has built a 5/8th vertical from a converted 11m antenna and also has done some extensive testing with the ICOM AH4 tuner, IC706 and an end-fed for auto-band operation in WSPR. More tests on all modes over the coming months are planned.

Some Radio updates for use on 8 meter band!

The following transceivers have been tested for use on the band, thanks to Phil EI9KP, Brendan EI6IZ, Padraic EI9JA and Dominic EI9JS for their help in compiling this list so far.

Icom IC706, IC7200, IC7300
Yaesu FT817, FT857
Vertex FTL-1011H

Any of the above that are wide-banded will work on the new band allocation.

P.S. The use of radios on this band is at the owner's risk.

Phil EI9KP hopes to be back in Ireland by February 2019 in time for the Coolmine rally, and will be active on the band again.

More pictures and info about the club are on the website: www.ei7mre.org

A note from Phil EI9KP

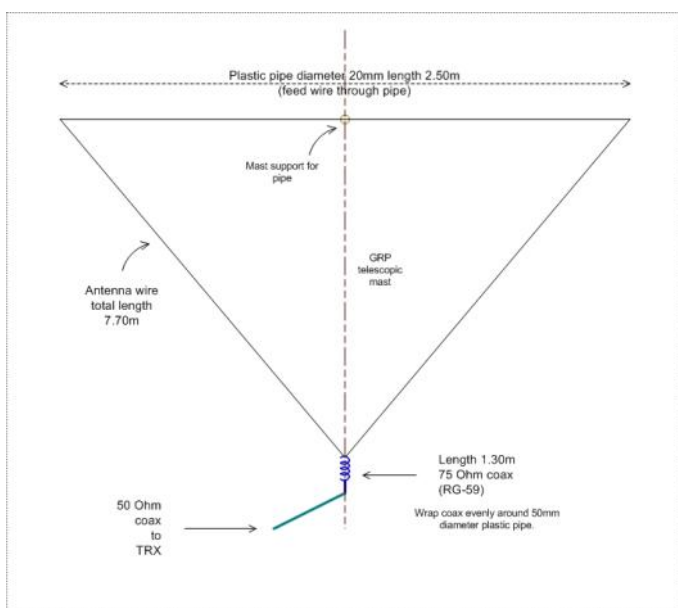
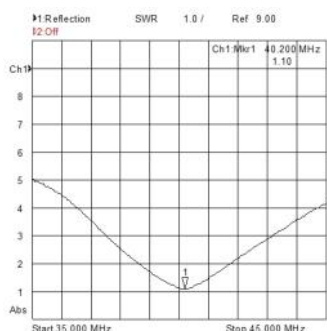
Delta Loop construction

For a test set-up the fibre mast was adequate, however, it does not like wet and windy conditions as the fibre sections will collapse even when taped. For a more permanent setup I plan to use a GRP (glass fibre reinforced plastic) tube, reinforcing the lower end with an aluminium tube, to mount in a wall bracket. The horizontal wire support is 20mm PVC electrical conduit, the loop wire running inside. I am using a similar construction for the 6m and 4m SOTA Delta Loops. For portable use the support comes in two sections but for permanent use there is no reason to do that. I will use some self tapping screws to stop it spinning around under windy conditions. The loop wire is surplus military field telephone wire, a very thin diameter twisted-pair type.

The impedance adapter is a quarter wavelength 75 ohm coax (RG-59), to achieve a 50 ohm feed. The length is 1.30m end-to-end; I strip back 1.50cm either end to accommodate mounting the cable on a 50mm tube, a recycled "silicon sealer" tube. I tightly wound the cable around the tube, pushed it through 6mm holes, one end soldered onto an N-chassis connector; on the other end I soldered cable shoes and fixed it to M6 bolts. The Delta Loop wire also has cable shoes fitted, I used wing nuts for practical portable use. It is kind of visible on the photo but I don't have a good close-up.

The centre plastic support is cut from 7mm kitchen cutting board. The additional holes are for reusable tie-wraps, for portable use.

The schematic shows the 8m Delta Loop in horizontal polarization; the feed point is at the bottom so it looks like an upside-down Delta. I also tried vertical polarisation shifting the feed point to one side of the support and running the loop wire to the top of the supporting mast so it looks like a Delta. There was a little shift in resonant frequency, to be expected. The loop was useable for the 41.500 MHz FM frequency, could be tweaked a little if only intended to be used for FM/ vertical polarisation.



Limerick Radio Club

Simon Kenny EI7ALB

Limerick Radio club resumed regular monthly meetings at the Limerick Institute of Technology in October.

Due to circumstances beyond our control the LRC 2M Repeater, EI2TAG is off the air UFN. In the meantime the IRTS News will be read on the LRC 70cms Repeater: Output 433.125MHz, Input 434.725 MHz, locator IO52PR, at the usual time of 20:00 on Monday evenings.

Club members Harry EI2KL, Brendan EI0CZ, Michael EI2IX, Michael EI3KO, Simon EI7ALB and Alan SWL, activated the Special Event Callsign EI100MCV and logged 161 QSOs on the 12th October. The club ICOM-756 PRO, Acom Linear and full size G5RV were set up at Shannon Air Adventure.

The LRC Rally will take place on Sunday 10th March 2019, in the Radisson Blu Hotel, Ennis Road, Limerick.

The IRTS Radio News Bulletin is now broadcast every Monday night at 20:00 on the Limerick Radio Club 70cm repeater on 433.125 MHz.



Brendan EI0CZ activating EI100MCV



Alan SWL, Michael EI2KL, Simon EI7ALB, Harry EI2IX, Brendan EI0CZ at EI100MCV

Lough Erne Amateur Radio Club

David Calderwood GI4VHO

It has been a busy few months for the Club. In July three members Roy Hetherington MI0LLM, Gordon Ramsey MI0LBW and Nathan Prentice MI0NPR passed the full licence examination and obtained their new callsigns.

YOTA 2018 South Africa

In August, Nathan MI0NPR was selected as a member of the UK team to attend the YOTA meeting which was held in South Africa. Twenty-three groups from Europe, Africa and North America gathered at Gauteng near Johannesburg during the summer to share in activities related to amateur radio.

In November, in an illustrated talk, Nathan described his experiences including meeting with a cheetah, launching the group's electrical experiment in a weather balloon, a visit to a circuit-board factory, construction of a radio transmitter and, the highlight, a visit to a game park. Details of Nathan's talk can be seen on the Club's website www.learc.eu.

Nathan has since been appointed as a member of the youth committee of the RSGB.

Fearmanagh Triathlon

In September members of the Club provided radio support to the organisers of the Fearmanagh Triathlon. The race, with over 300 athletes, took place over the mountainous parts of west Fermanagh where communications are difficult. From various locations members reported back to base the location of the athletes and needing help or with breakdowns. These messages were passed to the organisers for action.

Armistice Day at Enniskillen Castle

On 10th November the Club participated in events to

commemorate the 1918 armistice. Enniskillen was the first town in the United Kingdom to hear news of the end of the war. At 7.30 soldiers in the town heard a transmission from Marechal Foch in Paris instructing his soldiers to cease fire at 11.00. News quickly spread throughout the town.

In recognition of radio's importance in 1918 the organisers of armistice day events asked the Club to take part in activities at Enniskillen castle. The special callsign GB1918EKN was obtained and Club members made over 100 contacts during the afternoon. The Club used its new Comet H422 antenna mounted on a portable tower lent by Raymond Nelson MI0RMD.

The station was visited by members of the public who had the opportunity to find out about the historic transmission in 1918 and also try their hands at Morse code. Photos of the occasion can be seen in the News section of our website together with an interview of Nathan about amateur radio on the John Toal show on BBC radio (at minute 13 of the programme).



Operating at Enniskillen Castle: Alan GI6PYP on mike with William 2I0EKN logging and Nathan MI0NPR on guard



At Enniskillen Castle with Alan GI6PYP and Brian MI0TGO



GB2EKN with Comet H422 antenna and mobile mast (thanks to Raymond MI0RMD)

Galway VHF Group

Steve Wright EI5DD

2018 has been a busy year for the Galway VHF Group. Our activities commenced with the IRTS AGM weekend, held in the Galway Bay Hotel, Salthill. Saturday was devoted to a series of lectures on Saturday afternoon and the Annual dinner in the evening. On Sunday, the Rally was surprisingly well attended with many traders and exhibitors. The AGM took place in the afternoon. We thank all those who attended the dinner, rally and AGM in Galway.

The Galway VHF Group is very active with AREN and emergency communication support was provided for the following events:

Connemara Ultra Marathon - 22nd April
Kinvara Rock and Road Marathon - May
Galway Regatta - 17th June
Castlebar 4 Days International Walking Festival - 28th June
Galway Walking Club Marathon - 18th August

During these events new technology was tested in conjunction with the existing HF, VHF and UHF technology used for the last number of years.

The Galway VHF Group has a policy of utilising any funding for the benefit of the wider amateur community, and following the Rally held over the IRTS weekend, it was possible to advance the projects to the point where they could be pressed into service.

The Galway multi-mode digital gateway EI2GCD operating in DMR and Yaesu Fusion had undergone tests and was ready for installation at a high location. The antenna system and feeders were purchased to complete this project. This project was installed on site on the 4th of November 2018.

The Galway DMR repeater was purchased shortly after the AGM. Time was spent on setup, bench testing and working with internet connectivity to ensure trouble-free service. This was also pressed into service from a high site overlooking Galway city and providing saturation coverage of the city and surrounding areas within a 35 mile radius.

The 2m Yaesu Fusion Wires-X gateway was switched into service mid September. This has provided good coverage of Galway city enabling experimentation with networking on this unique digital mode.

All three projects have performed beyond expectation and have provided sufficient coverage to allow newcomers to digital radio plenty of opportunity for experimentation and communication with national and international users.

With the current crop of projects on the air, the Galway VHF Group has purchased two more Hytera RD985 DMR repeaters. One of these will replace the existing analogue repeater at Abbeyknockmoy Co. Galway. This should occur in the early quarter of 2019 once the licensing has been updated to accommodate DMR. In the meantime, Steve EI5DD has given lectures on digital radio to Limerick Radio Club, Galway Radio Club and the Shannon Basin Radio Club. There was considerable interest in DMR from the

Shannon Basin Group. The possibility of locating a DMR repeater in the area and a follow up was discussed with a good outcome. We look forward to setting a repeater to cover the area in the New Year. This will enable a wide area to be covered. We have set up the Galway Digital Radio Group Page to assist those new to digital radio and those wishing to learn more about it.

We look forward to completing our last two repeater projects early in the new year as this will serve a huge area from the West and towards the midlands and will involve members of Galway Radio Club, Mayo VHF Group, Galway VHF Group and Shannon Basin Club. We are indebted to all those who have rowed in with our projects especially John, MI0AAZ, who inspired the interest in digital radio two years ago.

Our webpage <http://galwayvhfgroup.blogspot.com/>

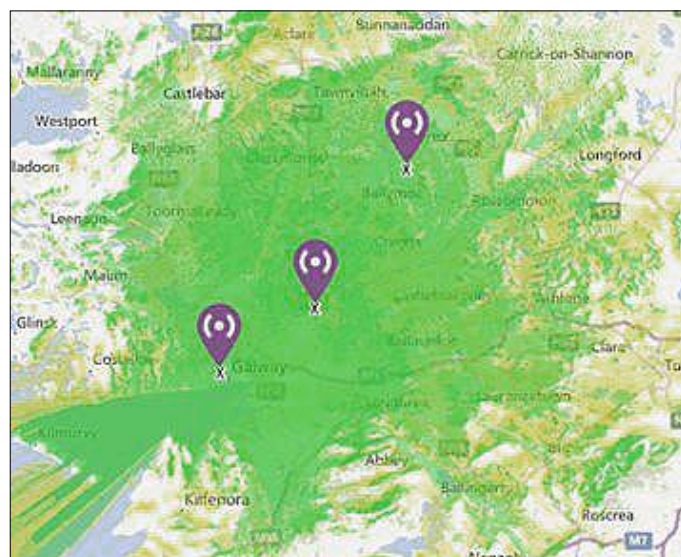
Galway Digital Radio Group Facebook Page
<https://www.facebook.com/groups/745516459124467/>



Steve EI5DD at Shannon Basin Radio Club



EI7RHD Repeater and Gateway Assembly (left) and (right) EI2SD Wires-X Gateway



Proposed coverage of the West of Ireland DMR Network early 2019



South Dublin Radio Club “Join a Club Week”

Adrian Connor EI9HAB

connor.ado@gmail.com

On Monday the 15th of October I happened to be listening to the Ray D’Arcy show on RTÉ Radio 1. Ray was following up on an email he had received the previous week from a listener, Tom, who had highlighted the problem of social isolation around our country, both in rural and urban areas. The fact is that there are many men and women around our land who, for a variety of reasons, are in this position. Many have home-care responsibilities, others have irregular working patterns which make socialising more difficult, and many are simply missing social interaction in their day-to-day lives. Tom’s email to the Ray D’Arcy show suggested that those seeking social interaction, camaraderie and friendship should consider joining a club, i.e., that those seeking a social outlet should reflect on what pursuits interest them and join like-minded clubs. However, Tom also alluded to the fact that shyness or a lack of confidence may inhibit some from initiating that first contact with a club or group. Tom’s idea to combat this hurdle was to propose a national “Join a Club Week”, coordinated by the Ray D’Arcy show.

The Ray D’Arcy show was subsequently contacted by clubs of all types stating they were open to new members at any time. Such was the response from listeners and clubs alike, that they decided to designate the following week (22nd – 29th October) as national ‘Join a Club Week’, with the initiative being supported and coordinated by the show. Ray pitched this initiative as “sort of like a national fresher’s week with clubs all over Ireland throwing open their doors to everyone”. He was looking for clubs to sign up (any and every type), “bridge clubs, running clubs, camera clubs, Zumba, underwater hockey, dodgeball, archery, drama, astronomy, choirs - as many as possible”.

Being mindful of shyness or lack of confidence in some individuals making that first step to join a club, the ethos of the initiative was clearly set out by the show - it was to encourage people to get out and try something new without the pressure to sign up or set up an initial meeting; recognising that it’s intimidating to show up at a club on your own. Ray wanted to make it a little bit easier for people to engage in something that interested them.

Clearly, as a member of EI2SDR I was of the firm opinion that this was an opportunity to promote our club that couldn’t be missed. However, there was time pressure. The initiative was being organised for the following week; we had one week to arrange an open night! I immediately alerted club members to the initiative via our WhatsApp group with a view to discussing “Join a Club week” at our next scheduled meeting - the following evening. When I raised the issue the following evening at the club there was nothing but enthusiasm for the idea from committee and club members alike.

The first order of business was to advertise the fact that we were having an open night event. Our initial port of call was to get EI2SDR’s advertisement on the Ray D’Arcy show website. The show had created a dedicated webpage for “Join a Club Week”. This included an interactive map of Ireland; whereby anyone interested in joining a club could simply click on a county. In turn, it listed all Open Club events scheduled for “Join a Club Week”. RTÉ also provided a downloadable promotional poster. I edited this to suit our

club’s needs and emailed it to members, encouraging them to display it in their workplaces, local shop notice boards etc. The show also initiated a specific Twitter “hashtag”, #ClubWeekRTE @RadioRayRTE, thus opening up another social media platform to advertise our open night event. I took to Twitter and tweeted our poster/advertisement to other appropriate Twitter accounts such as STEM (Science, Technology, Engineering, and Mathematics) societies in various colleges, hobbyists, maker groups, etc. The idea was to get our message out as widely as possible.

The next step was to decide what form our open night event should take i.e. what could we do in order to demonstrate what our amateur radio club has to offer to any potential newcomers?

Club members often bring equipment or on-going projects to our regular club nights. This is usually in the form of two guises, either as a “show & tell” (where we are treated to some shiny new piece of kit, homebrew project, new software demonstration etc.), or to troubleshoot an equipment fault or problem for a member; whereby the collective club brain is brought to bear in order to find a solution. Based on this, I instinctively knew that we could have diversity of displays for newcomers to see. Again, I contacted EI2SDR members, asking them to bring suitable projects or equipment to display on the night, and to be willing to talk visitors through them. Members responded excellently and we had a number of manned displays in position for when the Open Night kicked off at 20:00 on the 23rd October.

The Event

To greet visitors and members, the display nearest the entrance doubled as our reception desk and also hosted a display labelled “Beginners Corner”. Here, visitors were welcomed to the club and given an information booklet. The booklet outlined what amateur radio is and also detailed some club information and history.

The “Beginners Corner” display was set up with exhibits that many of us radio amateurs and SWLs are familiar with. They were the type receivers that many of us use as standalone devices or to augment our stations at home and included; a Tecsun PL660 LW/MW/HF/Airband receiver, a VHF scanner and SDRPlay RSP2. These devices were all running, with headphones attached, and visitors were encouraged to try them out. Fortuitously headphones were in place as the event got noisy, in a good non-RF way! The SDRPlay RSP2 was most popular item at this display and proved to be a great tool when attempting to explain the fundamentals of radio to newcomers. The visual and interactive aspect of the SDR waterfall made an impression on those exploring radio for the first time – or indeed for those coming back to radio.





Welcome Desk and Beginners Corner

Our next display was provided by Derek EI9HSB and was the ubiquitous Boafeng UV-5r. This radio was demonstrated next to the “Beginners Corner”. One of the purposes of both displays was to demonstrate that entry level equipment for prospective radio hobbyists need not be expensive and that sophisticated looking equipment like SDRs or entry level VHF transceivers are very reasonably priced.

Members also brought a number of CW (Morse) keys and practice oscillators. Again the interactive nature of this display drew attention from members and visitors alike. There are now mutterings of some club members undertaking Morse studies in the New Year!

Tom EI7HT, Nick EI2JL installed the next display. This consisted of a colourful board of QSL cards spanning the near forty-year history of the club. Again, the visual aspect of this display proved to be a great focus and opened up discussions on the international aspect of the hobby.

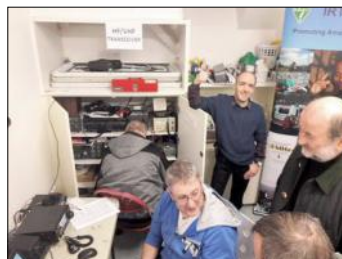
Harry EI8HVB demonstrated his phenomenally well engineered, all-homebrew, QRP Magnetic loop Antenna (11MHz – 24Mhz) with homebrew magnetic loop tuner/controller. Harry’s project is truly impressive and demonstrated the deep knowledge and technical competence of many in our amateur radio community. Harry’s project is based on designs of of Loftur E. Jónasson TF3LJ/VE2LJX;



CW Demo desk with QSL Card display in the background

you can find design details for this project online: <https://sites.google.com/site/lofturj/to-automatically-tune-a-magnetic-loop-antennav>

Another attraction was Keith EI5KO’s display demonstrating various aspects of “Ham-Tech”. Keith, with ICOM 7300 & multi-band vertical antenna in-hand, set up an impromptu station linked to Windows PC (laptop) running multiple software. Keith’s aim was to demonstrate how modern technology can be used with Ham radio for making contacts, logging and chasing DX.



Software Demonstrated:

WSJT-X by K1JT running FT8 Receive and Transmit.
Integrating with JTDX.
RTTY - Using MMTTY
PSK - Using Fldigi

Logging Software explained:

Log4OM
N1MM
Wintest

Online Clusters (where to look!)

Online Logs:

Log Book of the World (DXCC explained)
QRZ.com
eQSL

Keith’s display showcased the modern face of amateur radio and attracted a lot of interest; not least from established radio operators keen to learn more about new developments in amateur radio operations. The display also showed newcomers that amateur radio is (and always has been) at the cutting edge of technological development. Keith’s display was also a window on how open-source material, developed by radio amateurs, has become integral to the hobby worldwide.



(Left) Kevin EI3EU demonstrates his homebrew 70cm Yagi antenna. (Background) The author’s kids acted as welcome ambassadors!

Kevin EI3EU displayed a homebrew 70cm Yagi antenna. This an area of interest for Kevin and the purpose of his display was to demonstrate the practical aspects of antenna construction, and that such projects can be undertaken with a little knowledge and self-training. Again Kevin's display aimed to demystify aspects of the hobby that may be intimidating to a newcomer or to those of us with limited DIY experience (*photo previous page*).

There were large IRTS-branded posters promoting various aspects of the hobby. In particular there was one relating to ARISS (Amateur Radio on the International Space Station). This was another interesting focus for visitors and gave us the opportunity to showcase the role EI2SDR club members and the IRTS played in facilitating two recent Cork and Dublin schools contacts with the International Space Station. Conversations around this topic naturally strayed into a variety of related topics such as amateur satellites, SSTV, moon-bouncing (EME) etc.

For the duration of the Open Night EI2SDR's own HF and VHF equipment was on display with the club's 2m rig being active on the night.

Finally, the greatest display on the night was EI2SDR members themselves. The knowledge, skills and attitude evident in the room would have left visitors under no illusion as to breadth of amateur radio as a hobby, and that there is room for all levels of interest and ability.

Outcome

The event attracted eight visitors to EI2SDR. This was in line with what other clubs experienced during the week. These visitors came from a variety of backgrounds e.g. existing call-signs (new & old), previous or current interest in radio and communications technologies (professional & hobbyist), new interest, passer-by.

What we did well

Given we had one week to organise and take advantage of "Join a Club Week" the club demonstrated a quick response to an opportunity to promote the club. Members intuitively knew what to do and managed to display a diversity of radio related exhibits at very short notice. The night itself literally had the club room buzzing; this was great for newcomers to see. The open night energised club members and it was phenomenal to witness their interactions around different displays with newcomers and with each other - there was

incredible knowledge in the room. A very friendly and welcoming atmosphere was evident, a fact that each visitor to the club commented on.

What was learned

EI2SDR is reviewing its experience of arranging an Open Club event. Going through the process of arranging the event highlighted some areas for discussion and I am detailing these issues here as I am sure they will be of interest to other clubs.

Children First Act (2015). The club is currently considering the implication of this legislation. Having open club events and seeking new members threw up the prospect of persons under the age of 18 potentially seeking to join the club. Any club must adhere to the 2015 act should persons under 18 be in attendance.

GDPR - General Data Protection Regulation Act (2018). The club is also considering the implication of this new legislation vis-à-vis how best to manage the personal information of potential new (and existing) members, and be compliant with the legislation.

Ray D'Arcy's "Join a Club Week" gave EI2SDR a national platform and access to a vast audience that would not otherwise be possible for a small niche hobby club, we are very grateful to the show for that opportunity. However, the process of arranging the open event demonstrated a need for the club to improve how it communicates its presence and message to the outside world. We are reviewing current processes with a view to streamlining our communications in order that we have a more targeted approach for upcoming events. On this particular point, there is anecdotal evidence that likeminded groups of hobbyist, hacker groups, academics and students (those who are interested in STEM related recreational activities) reach out to each other via Twitter and subsequently attend each other's events. How our club engages with the "Twittersphere" in future will be debated.

Conclusion

I would like to thank some club members not mentioned above. Tony EI7GUB (committee chair) & Tom EI7HT for their support and guidance in arranging the open Club Night. Joe EI7GY for encouraging me to write and submit this article, as newly licensed Ham in 2018 it's an honour to be asked to do so. I would also like to thank Séan Nolan EI7CD (SK). I have only been involved with the club for the last two years and initially I had no idea of Séan's standing in the amateur radio community or how busy he was. Yet he always made me feel most welcome at the club. I know his energy and spirit was with us there on the night.

We at EI2SDR are proud of how our club responded to the Ray D'Arcy "Join a club week". Attracting eight visitors to what is a niche hobby club with only a week's preparation is good going. Other clubs reported similar levels of attendance.

For those amateur radio clubs interested in capitalising on the "Join a Club Week" initiative, the RTÉ web page is still active and accepting club adverts. There has also been a recent on-air update by the Ray D'Arcy show; they are consider running "Join a Club Week" again in 2019. Details about the initiative can be found at -

<https://www.rte.ie/clubweek/>



It was a bit of a squash at times!



Island Radio - a Reflection

Simon Kenny EI7ALB

Island Radio, not to be confused with Islands On The Air (IOTA), was a radio telephone service, in the 70 to 88MHz band, which was provided by the state across two departments during the 1950's to the early 1970's. The local post office telephone operator on each island had a radio-telephone link to the mainland telephonist who then made the necessary phone connection to the requested end user. At that time there were thirteen islands with single channel radio links.

The recent sad passing, on 21st October 2018 of Patsy Dan Rogers, RIP, the King of Tory Island, brought back memories of my very first project - that of replacing the old valve radio telephone links with more modern low-power fully-transistorised RF links in the early 1970's.

The local line technician of the then Dept Post & Telegraphs Engineering Division serviced the electronic units by replacing the faulty unit which was then sent for repair to the Dept. of Transport, Dublin Airport. The local technician was also responsible for battery replacement on the island along with repairing or replacing the four-element yagi antennas, as weather took its toll on them - particularly in winter.

That is how it was until the opening of the Radio Eireann VHF FM Broadcast service in the late 1960's. It became apparent that individuals, in the fairly immediate vicinity of an island radio link, found that tuning their newly-acquired VHF broadcast radios to

below 88MHz enabled them to earwig on some personal information.

The press got hold of it, questions were asked in the Dail which, when coupled with the ageing equipment and the need for frequent maintenance, especially in winter, resulted in the creation of a small specialist section within the Radio Division in the then Dept. of Post & Telegraphs Engineering Division, which would include responsibility for Island Radio. The local line P.O. Engineering Technician would still handle the first line maintenance. The replacement links moved up to 160 MHz with greater gain and physically smaller antennas.

It may be of interest to recall the technology and techniques of the time. Earlier communications used spark transmitters to/from some islands. The later single-channel radiotelephone links had three separate units, a transmitter unit and a receiver unit using quick-heat valves. These links provided communications to thirteen islands. A control unit, using only resistors, capacitors and post office engineering-type relays performed the control logic. The mainland had mains power but the island depended on batteries for power, which demanded some ingenuity in order to conserve them for as long as possible. A 'good' transmitter was capable of 250mw while a receiver needed less than 10 microvolts input to switch on the timing processes. A call originating from the mainland operator, would

switch on the mainland transmitter. On the island, it was necessary for the receiver to be switched on which, depending on the timing cycle, could take the logic up to twenty-five seconds. The island receiver was switched on for three seconds every twenty-five seconds. Likewise a call originating from the island switched on the local transmitter but could take up to twenty-five seconds to complete the RF loop. Oh, for a few AND, OR and NOR logic gates, as setting up the timing sequences of the control logic relays was a challenge.

Due to weather conditions Tory was frequently cut off especially in winter. On my first time there, I was confined to the island for about two weeks in November. Patsy Dan was the island postman at that time, which seemed to be an easy job as when the island boat returned from the mainland with supplies and mail, everyone on the island either collected their mail or nominated someone to collect it at the Post Office. Having befriended the artist Derek Hill of Queens's University, Belfast, Patsy became one of the original 'primitive artists' of Tory. He took me to see his work in Derek's studio, which was in a wood hut near the cliff, overlooked by Tor Mór, on the west side of the island.

Oh happy days.

Dedicated to all those unsung heroes who risk life and limb to bring and maintain services to all our islands.



Curragh to Inishturk, South Galway, 1970



Tory Island 1970 - EI7ALB moving equipment on a borrowed tractor



JOTA 2018

Brian Canning EI8IU

brianei8iu@gmail.com

In September, IRTS was approached by the leader of 17 Meath Longwood Scouts to see if there would be a possibility of getting an amateur to set up a station as part of the JOTA/JOTI weekend.

The email was passed to myself and I contacted Marty Grady (a native Sligo man) to see how we could help. The scouts had been using Skype for the past couple of years in order to contact other scouts around the world but the possibility of getting a proper amateur radio station set up would really enhance the whole event. It was agreed that we would definitely go up to the event which was taking place in the Larch Hill International Scout Centre in Kilmashogue, Co. Dublin.

The plan was to operate on Saturday 20th October. The day arrived and Fergus EI6IB (Shannon Basin Radio Club), myself and Mark EI6HPB (IRTS PRO) literally headed for the hills.

Fair play to Google, it got us to Larch Hill without any difficulties, and we arrived about 10:30 to be greeted by a very happy Marty and numerous scouts from his troop.

At that stage I think we realised the expectations from the troop were high. The adrenaline started flowing as we set about setting up a simple inverted vee antenna (thanks to Craig EI3FW for giving us his telescopic mast and the antenna) and putting our station together. Everyone was very impressed that after one hours work we were ready to communicate with the world. There were of course a few teething problems but these were quickly sorted. Shortly before mid-day we put out the first CQ de EI0YOTA (hopefully next year we will be using EI0JOTA). It wasn't long before we got several replies. The band conditions weren't great on the day but some interesting QSOs took place. The scouts took it in turns to sit at the station, listen to what was going on and then take the mike themselves. There was a lot of enthusiasm with some of the youngsters not wanting to give the mike back!

There were several QSOs with other JOTA stations in England and across Europe with interesting exchanges about the weather, favourite football teams, etc. Other notable contacts were with a Dutch Maritime Mobile station (due to logging issues I lost the call sign ... apologies) on his way from Holland to America. He was near the Azores and spoke to and answered several questions from the scouts. Some of them also spoke to American stations. What struck me was that once the answering stations knew that there were youngsters on the mike they couldn't be more helpful, and gave them all great encouragement. Of course



A Scout makes a QSO under the watchful eye of EI8IU

some of the younger scouts were a bit shy at the start but they all got more confident as the QSO went on.

Both EI6IB and EI6HPB went outside to demonstrate VHF with the scouts and great fun was had by young and old as they wandered around the huge site.

As the day went on, the event was visited by none other than IRTS President, Jim EI4HH, Joe EI7GY (Contest Manager) and Robert EI5KH (IRTS Secretary) and there was genuine excitement when Jim gave a short speech to the assembled scouts and indeed their leaders. One of the scouts asked Jim whether there was a minimum age for getting a licence so hopefully there is another Ham on the way!

We packed up around 18:00 after having about 100 QSOs. The scouts surprised us all by singing their 'Thank You' song which was a novel way to spend the evening.

During the day there were reporters from scoutingradio.com and from Dublin City FM. There were lots of recordings of the scouts on the air as well as interviews with Jim and Mark. See <https://www.podbean.com/media/share/pb-5ue4e-9cf94e> for the podcast and also podcasts can be found on the Dublin City FM site, look for Scout about.

There are pictures and videos on the 17 Meath Longwood Facebook Page
https://m.facebook.com/story.phpstory_fbid=2278616375501359&id=263005877062429

From the feedback I received, I think everyone enjoyed the experience and we have already been asked to return next year where we hope to have a bigger and better station.

Finally, I would like to take the opportunity to thank Marty Grady and the other Leaders for inviting us to Larch Hill and also of course the Scouts themselves. They were so well mannered and behaved, it was a real pleasure to demonstrate our great hobby to them.

I would also like to thank Fergus and Mark for all their help with setting up the station, playing VHF and for explaining how it all worked to the youngsters. Hopefully we will hear some of the scouts on the air in the not too distant future.



On the right, Jim EI4HH, Brian EI8IU IRTS Youth Officer, Joe EI7GY and Robert EI5KH with the Scouts at JOTA 2018 (Just visible behind is Mark EI6HPB)



Excerpts from the HX files

Pat Fitzpatrick EI2HX - Excerpt 044

Hello and welcome to extract 044 of the HX Files.

In this issue is yet another grab and go setup this time the radio is a Yaesu FT 897.

Plug Plug Plug

The Pelican case for this project was bought at a recent rally off the stand of the good people of the Mayo Repeater Group who attend rallies over the year selling some good radios and some weird and wonderful brackets and fittings that have helped fill my come-in-handly piles. As any one of you know when it comes to making anything you can never have enough fittings to choose from.

On with the show

The previous owner of the case had cut out pockets into the foam insert of the case for his Yaesu FT 817 go kit and this held the equipment safely during transit before he would set up the equipment on site. What I wanted to do was to permanently install a setup in the case and not being sure what radio I would use, I hoped that the FT 817's big brother the FT 897 would fit the case with some room to spare. Not being too sure of the radios size, a deal was done and sure, I can always add the case to the come-in-handly stock. But it turned out that the radio would fit the case if it was placed in one direction but was too long in the other direction, the one I would have liked it to be facing. But all was not lost. After mulling over a couple of ideas, one of which was that a turntable could be made so the radio could be swivelled from one direction to the other to allow the radio to clear the side of the case and then could be easily got at and operated.

Upside-down

The other main change was that the case would be turned upside down for mounting the radio because the radio would now be attached to the lid of the case and not in the tub of it. An old chopping board was used for a chassis, photo 1. It turned out that there are some kind of raised mounting blocks moulded as part of the lid (for whatever it was made for in the



Photo 1

first place) and they have a brass insert that is treaded for some screws. The lid has some raised points and not wanting to ruin the case by possibly cutting through the lid trying to remove them a template was made from some cardboard first and then taped to the chopping board (photo 1 again) and some holes drilled to allow the board to fit over mouldings. After some fine tuning with a file the board fitted just right.

A couple of different size washers were used as the diameter of the hole to be covered was bigger than a €2 coin. With the correct size and a couple of smaller washers used to stop the mounting screws pulling through the larger washers mounting

hole, the board was fitted into place for the first time. As there are only four fixing points for the chassis and the fact that the mounting screws are only 3mm wide and the treaded part of the insert only 5mm I did think of using some adhesive to help with keeping everything in place, but on thinking about it for a while, I realised the case would be used and stored on the flat and would only be carried from home to car to operation site, so I decided to leave well enough alone and keep with plan "A".

Hammer time

Not having a mobile mounting bracket for the radio, I had a look on the Net and found that there was no shortage of them, but, with some of the sites charging more for postage than the bracket, I decided to give it a go and make one. Some metal was taken from the stock pile of bits and after some careful measuring it was over to the vice and some hammering and bending done, followed by some drilling in the sides of the bracket to line-up with the mounting holes in the sides of the radio. This was not too hard to do as the bottom panel of the radio was removed as were the internal batteries and as you could see the mounting holes from the inside it would be easy not only to use a scribe to scratch a mark on the bracket but more importantly to measure the length of the screws to be used to attach the bracket.

Then it was over to my brother to do some welding for me; he welded a bolt to the main part of the bracket and a nut to a support plate that would be attached to the underside of the chassis. Photo 2 below is of the mobile mounting bracket parts before any cutting of the end of the bolt for the clearance of the radio. When the radio was being turned into the operating position it was a little tricky to get the radio and the bolt on Auto ATU to turn and not only not rub off the sides of the case but also allowing the case to close and not be pushing against the equipment. By adjusting



Photo 2



Photo 3

the locking nuts bit by bit the radio cleared the lid and by moving the whole assembly around the spot was found so that all the manoeuvring could be carried out without any damage being done, and with that done the holes were drilled for mounting the plate into place.

In photo 3 (previous page) you can see the radio and tuner in place, using Velcro to attach the ATU to the side of the radio or to attach it to the radio when being brought out as I could not rotate cleanly with it attached to the side of the rig. The Auto ATU is made to bolt to the side of the rig but as mentioned earlier when bolted to the rig the equipment would not turn, and you would not want to take the cover off the tuner every time you go /P as the mounting screws go through the main circuit board of the tuner and some damage could be done.

Out and about

When using the equipment portable the aerial of choice is a fishing pole type (photo 4), erected to its full 6m height by pulling out each section of the fishing rod into place with the aerial wire running through the centre of the pole, hammering a small length of angle aluminium into the ground and attaching the pole with a couple of small bungee cords. The balun in the kit comes with a SO239 fitted on one end and red and black connectors (like those fitted to a power supply) on the other end. The balun (4 to 1) is attached to the aerial by firstly connecting the vertical length of wire to the red connector and the counterpoise to the black one and then the coaxial cable is screwed into the SO239 on the other end of the balun.

That's all folks

Well that is it for this issue of the HX Files, good DX to you all.

Best 73

Pat

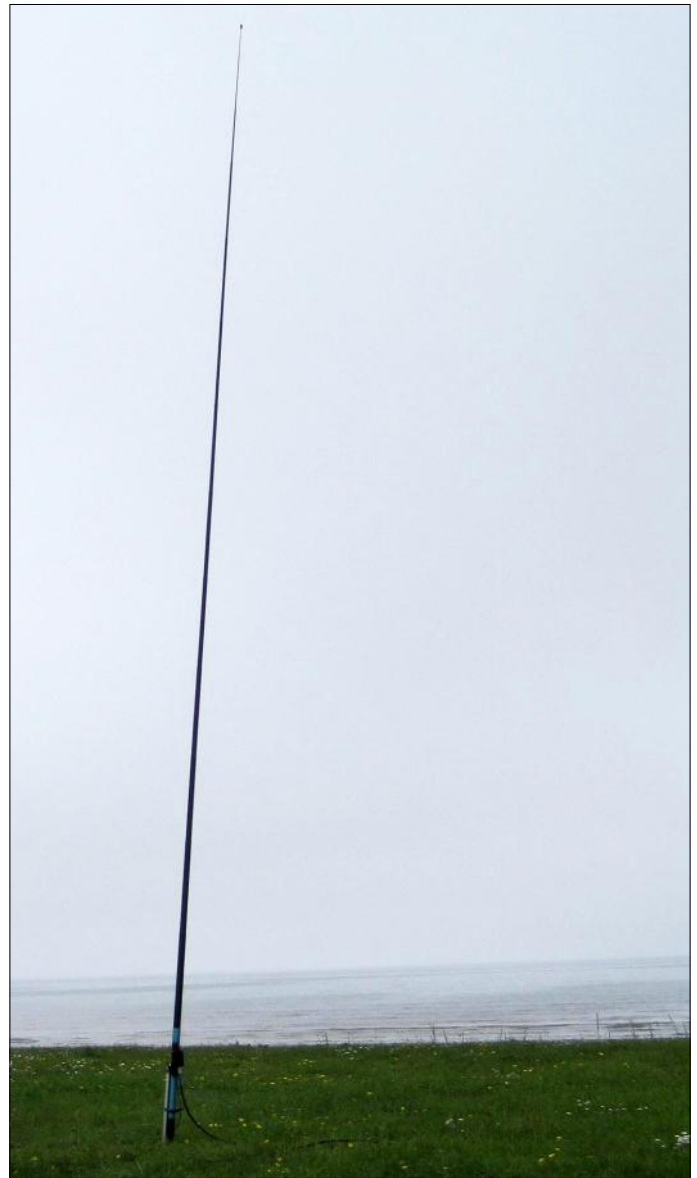


Photo 4



IRTS AGM 2019

13/14 April 2019



Hodson Bay Hotel, Athlone

Lectures, Dinner, Radio & Electronics Fair and AGM



Hosted by Shannon Basin Radio Club

Updated information on www.irts.ie/agm

Email info@shannonbasinradioclub.com



The μ BITX CW/USB Transceiver Kit Build

Tony Breathnach EI5EM

ei5em@eircom.net



Just before Christmas last year I was attracted when Ashhar Farhan, VU2ESE advertised his newly-launched μ BITX CW/SSB transceiver kit at a special promotional price of \$109 (now \$129). I was immediately hooked and placed an order the same day. (<http://www.hfsignals.com/index.php/ubitx/>). A local enterprise in Hyderabad provides employment for local women winding the toroid coils and assembling and testing the PCBs for the μ BITX

Strictly speaking, the μ BITX is not a kit. However, it needs to be assembled. Two complete units are supplied; the main PCB and an LCD display mounted back to back with an Arduino microcontroller. The two assemblies plug together at a right angle to each other. All the controls, switches, plugs and sockets need to be wired and soldered, although everything is supplied with the kit, including a microphone.

The user needs to supply an enclosure for the project. Custom enclosures are available from various suppliers on the internet. I constructed my own enclosure from double-sided PCB material, soldering the internal seams together. I then cleaned, lightly sanded and applied several coats of clear lacquer to the outer surfaces.

For the price, the specifications of the μ BITX are incredible. It is a double-conversion superhet. RF output is about 10 W watts on 7 MHz but power decreases with increasing frequency. My rig's output reduces to 3 watts on 28 MHz. The preloaded software on the Arduino is fairly basic but several amateurs have developed improved software which can easily be downloaded to a PC before uploading to the Arduino using a USB cable. In my case I use Ian Lee's (KD8CEC) software. The upgrade was well worthwhile, adding many enhanced features.

It took eight weeks for my order to arrive by post from India. On inspection, I noticed that one SMD resistor was standing up vertically with only one end soldered to the main PCB (tomb-stoned). I rectified this before assembling the kit. Just a note of caution; NO WARRANTY is offered and the kit is supplied as is. However, there is an excellent online support forum offering technical help and advice.

I assembled the kit and wired up all the peripheral controls, switches, plugs and sockets. I applied power through a 1A fuse. There was no smoke and I could hear signals when I connected an antenna. I replaced the fuse with one of 2.5A

value and tested the μ BITX on transmit. It produced a nice pure sine wave on my oscilloscope.

Some programming commands require pressing the PTT switch, so I added a separate PTT push-button to the rear panel for convenience. The original Version 1 hardware and software specified that the μ BITX could be wired for a straight key or twin paddle but not both. I modified the wiring and used a toggle switch which allows either type of key to be selected. Switching is now possible with upgraded software, but I find it more convenient to select by the flick of a switch instead of having to go into the menus.

I operate almost exclusively on CW and have previously built several memory keyers using the K16 chip by K1EL. I decided to incorporate one into the rig. This chip is programmable using Morse Code from a twin paddle. I didn't want to overcrowd the front panel with push-buttons so I only installed one memory button and programmed it with my CQ call.

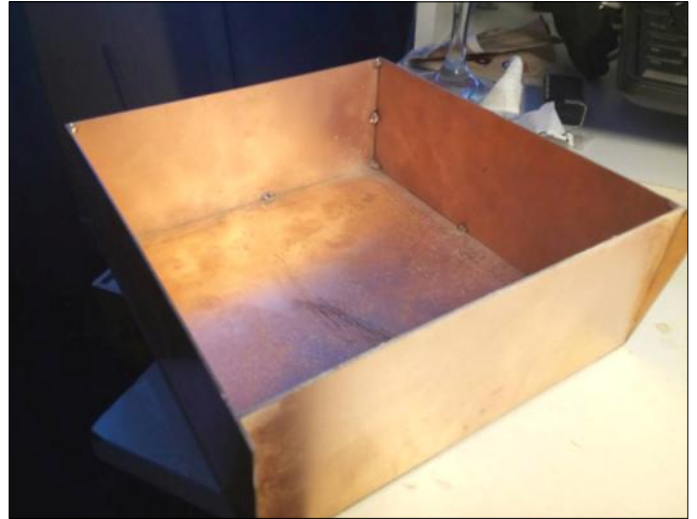
I then installed a narrow CW filter and lifted the circuit from the QRP Notebook by the late Doug DeMaw, WIFB. It peaks at about 700 Hz. The original design consisted of a dual operational amplifier. I modified the circuit to use two single more recent low-noise TL081 devices. I also built an audio preamplifier ahead of the filter to overcome any attenuation of signals through the filter. That circuit was also lifted from the QRP Notebook and I likewise substituted another TL081 for the original device. The filter is selected by a toggle switch on the front panel.

I designed all of my own PCBs for the modifications by hand before etching and populating them. I have uploaded a YouTube video illustrating this construction method. Just search for EI5EM on YouTube if you are interested.

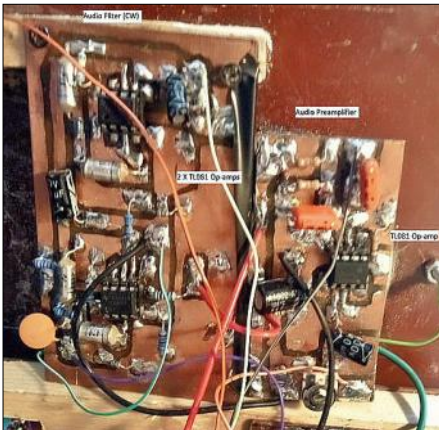
The next modification I carried out was fitting a receive preamplifier and a bypass relay at the antenna BNC socket. This is selected by a toggle switch on the front panel. However, I ran into a problem here. The single transistor in the preamplifier failed twice and had to be replaced. It turned



Double-sided PCB Panels for the Case



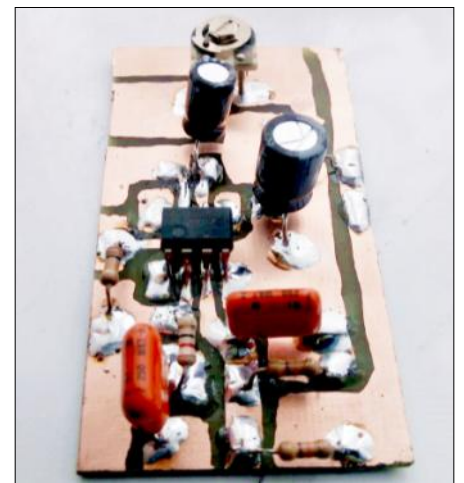
Spot Solder



Audio Section preamp and filter



RF amp fitted

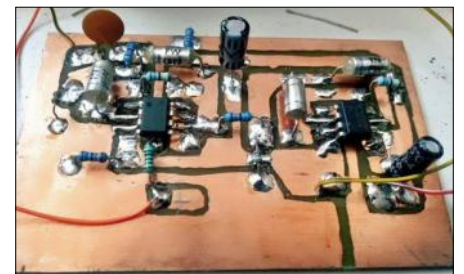


Audio preamp

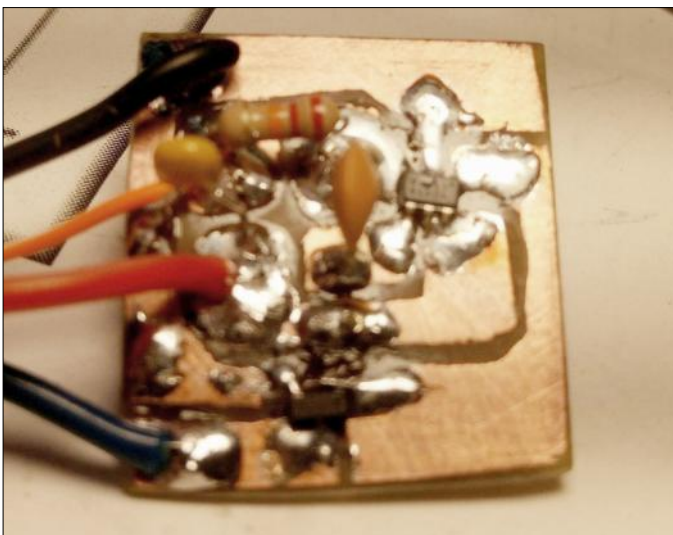


BCI Filter

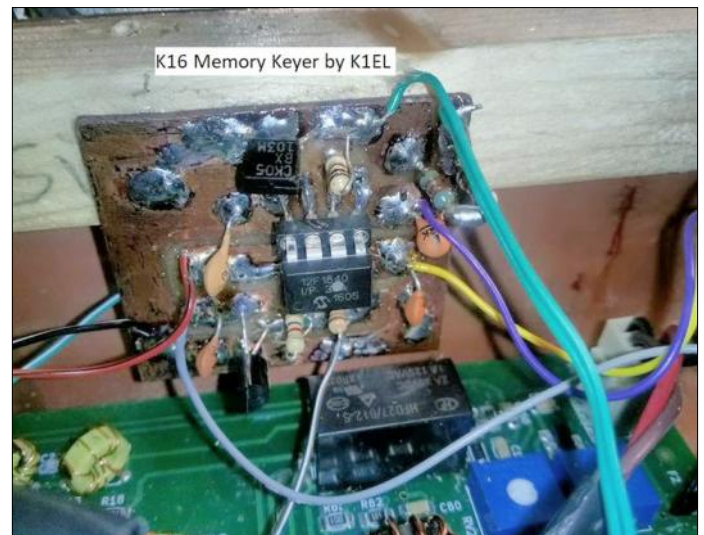
Some views of the
project during
construction by EI5EM



CW Filter



Populated PCB Touch Pad



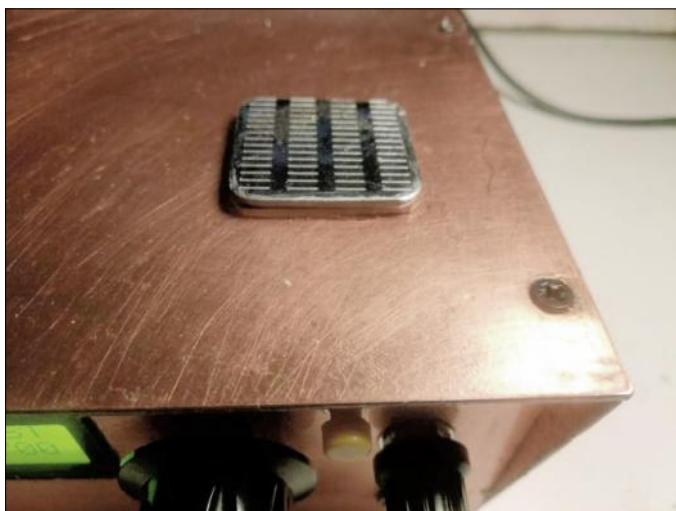
K16 Keyer Chip Fitted

out that the relay I was using was sluggish when dropping out, allowing RF to feed directly into the preamplifier output for a few milliseconds on switching to transmit, thus destroying the transistor. Two reversed germanium diodes on the output sorted the problem out. Luckily, I had ordered a pack of five transistors and had three to spare!

According to some users, the μ BITX is prone to broadcast band interference breakthrough on 80m, although I have to admit I didn't experience this. Nonetheless, I incorporated a BCI high-pass filter allowing frequencies above about 2MHz through but blocking frequencies below. Perhaps this was just an excuse to carry out another modification! This rendered 160m unusable but I have seldom used top-band, so for me it is not a problem. Fitting the filter involved cutting a track on the main board and connecting the BCI filter across the break.

My first SMD project was last year when I, with some trepidation, constructed a capacitive touch twin-paddle (also on my YouTube channel). The bright idea then crossed my mind to include a single touch pad as a straight key on the lid of my μ BITX. This is one half of the circuit that I had used previously for the twin paddle. Once again, a steady hand and an illuminated jeweller's loupe were required for designing, etching and populating a small PCB for this SMD sub-project.

I bought a stainless steel can opener from the local Flying Tiger shop for €1. I cut and filed this down and mounted a small 25mm square piece as a touch-pad on the lid, insulating it from the case with a piece of Veroboard. I soldered a sense wire to the tracks on the upper side of the Veroboard which made contact with the metal touch-pad above it. These were then glued together followed by gluing the insulated lower side of the Veroboard to the lid. The insulated sense wire passes through a small hole drilled in the lid to the PCB below.



I called it a day with modifications at that stage, resisting the urge to add the larger Nexion colour display as many other constructors have done. In any case that would have required a larger enclosure and that didn't appeal to me. I have to say that I am very pleased with the end result of my endeavours. I have made some nice QSOs with the rig. This project has provided many hours of enjoyment over several months and I gained a lot from the experience.

Some early kits suffered a problem with the TDA2822 audio chip overheating and failing. The audio path has been redesigned on later versions to prevent this. However, Peadar EI2IF ran into this problem, although I didn't encounter it myself. To solve Peadar's audio problem, I constructed an outboard audio amplifier using the ubiquitous LM386 chip preceded by a single op-amp. This setup bypassed the damaged audio chip, which was left in situ. While I was constructing the new audio amplifier I decided to build a CW filter as a bonus for Peadar. His μ BITX is now working fine also!

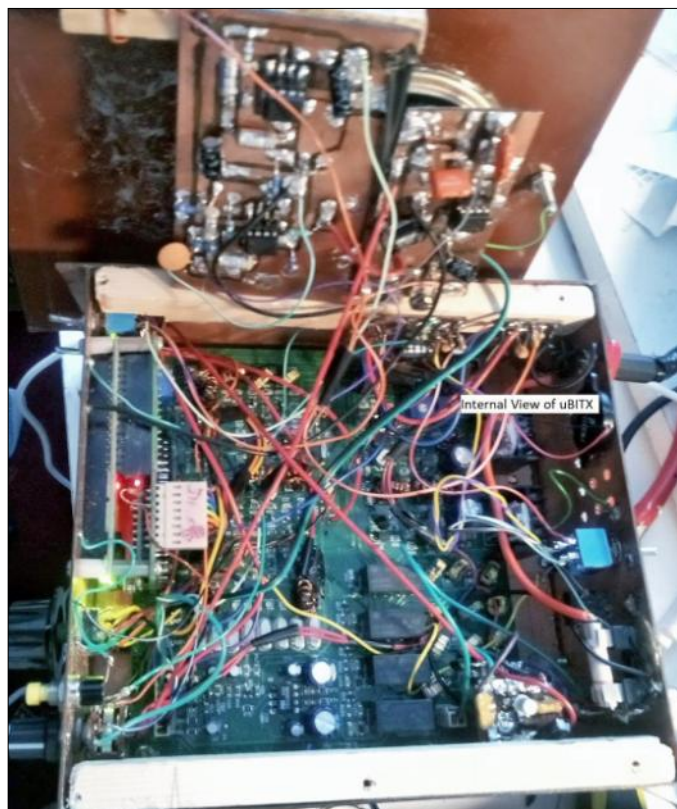
There are many improvements in later hardware versions of the μ BITX. However, I am very pleased and satisfied with the modifications and improvements that I carried out on my original version. I have several YouTube videos uploaded of my μ BITX build. Just search under EI5EM and uBITX if you are interested in viewing. You might also be interested in the EI QRP and Homebrew Facebook page where several constructors have uploaded videos and comments on their own builds.

I subsequently built a combined, compact L-match ATU and SWR meter to go with the μ BITX, but sin scéal eile!

I ordered all the components for my PCBs online from Farnell. This company has a fantastic range of products delivered by courier the next day, an incredible free service. See <https://ie.farnell.com/>

By the way, the μ BITX is also known as uBITX and mBITX if you are looking for additional information on the internet.

Slán go fóill de Tony, EI5EM



Internal view of μ BITX

RMS Leinster Commemoration

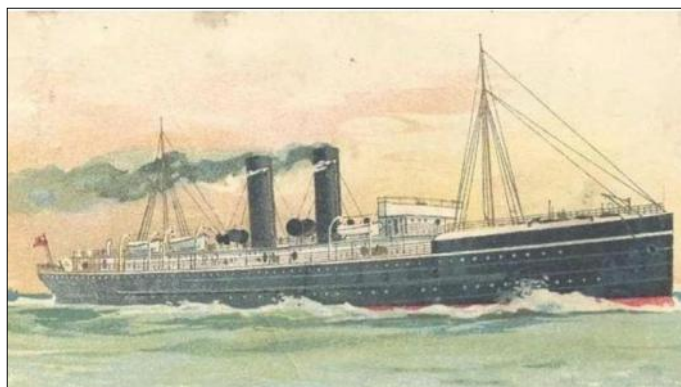
National Maritime Museum Radio Club

The tragic story of the final voyage of RMS Leinster (the "Mail Boat") has been well publicised in recent months. On 10th October 1918, RMS Leinster, sailing between Dun Laoghaire and Holyhead, was torpedoed just off the Irish coast, resulting in the deaths of 567 passengers and crew. This was the largest ever loss of life in the Irish Sea. The centenary of this sad event was commemorated in October this year through a number of ceremonies in and around the Dun Laoghaire area.

The National Maritime Museum Radio Club, call sign EIØNMMI, which was formed in 2016 and is based in the National Maritime Museum in Dun Laoghaire, participated in the commemoration. Robert Brandon EI5KH, who is a volunteer guide in the National Maritime Museum, was responsible for setting up and developing the club.

The club obtained the special call sign EI1ØØMCV ('MCV' was the call sign of RMS Leinster), which has been very active since the beginning of 2018. One of the challenges facing club members was to have an effective demonstration station within the museum up and running for the commemoration events. The museum is housed in Dun Laoghaire's 180-year-old Mariners Church, which is a superb building from an architectural and heritage point of view, but not an easy one on which to install antennas. The building also suffers from a very high level of RF noise, some of which comes from its own lighting and security systems. The late Seán Nolan EI7CD – one of the club's founder members – devoted a lot of time and energy to overcoming the problems faced in developing a suitable radio shack for the club, and he also provided much of the club's equipment. Thanks to the efforts of Seán and other club members, for the week of the commemoration events, the club had a good working 'Radio Room' in place.

RMS Leinster's route was between Dun Laoghaire and Holyhead in Wales, hence many of those who perished in the



sinking were Welsh. Dragon Amateur Radio Club, based in Anglesey, arranged to have the special call sign GB1ØØMCV as part of the same commemoration, and we coordinated our activities with the Anglesey club, including a special Certificate available for contacts made with both EI1ØØMCV and GB1ØØMCV between 10th and 28th October.

The main commemoration events in Dun Laoghaire took place Wednesday 10th October. We had the station on air for the day, operated by Robert EI5KH, Dave EI6AL, Peter EI7CC and Joe EI7GY. The highlight of the day for the museum radio station was a QSO exchanging greetings between EI1ØØMCV and GB1ØØMCV.



Dave EI6AL

For this QSO, Dave EI6AL, a former ship's Radio Officer, was on the key at our end, and his message was as follows:

GB100MCV DE EI100MCV

FROM ALL RADIO AMATEURS IN IRELAND TO
THEIR COLLEAGUES IN WALES AND BEYOND.



Dave EI6AL, Peter EI7CC, Joe EI7GY, Robert EI5KH

TODAY WE COMMEMORATE THE SINKING 100
YEARS AGO OF THE RMS

LEINSTER IN THE IRISH SEA WITH THE LOSS
OF 567 LIVES.

OUR THOUGHTS ARE WITH THOSE WHO DIED IN
THE TRAGEDY AND THE RELATIVES AND

FRIENDS OF THOSE WHO SURVIVED.

THIS MESSAGE IS BEING TRANSMITTED USING
MORSE CODE, THE ORIGINAL

LANGUAGE FOR MARITIME COMMUNICATIONS AND
FOR SHIPS IN DISTRESS.

END.

The reply from GB100MCV (with James MW0JHC /
EI8KJ, also a former ships radio officer, on the key) was as
follows:

EI100MCV DE GB100MCV

TKS FOR MESSAGE RECEIVED AND
ACKNOWLEDGED.

GREETINGS FROM WALES AND OUR RADIO
AMATEURS.

END.

Two of Dragon Amateur Radio Club's members – John
Pritchard MW0JWP, Club Secretary and regional
representative for RSGB, and Paul Dicken GW1PCD, club
Publicity Officer – were in Dun Laoghaire for the
commemoration and spent much of the day with us in the
museum; Paul used the Museum's 2m station to keep his
fellow club members in Wales posted on the day's events.
Many other visitors from around the world looked in on the
Radio Room. Although some of our visitors had come across
amateur radio previously, most of them had not previously
seen it at close range, so it presented a good opportunity to
showcase the hobby in action.



Robert EI5KH, John MW0JWP(seated), Paul GW1PCD



Peter EI7CC

To date, EI100MCV has made more than 14,000 QSOs with
stations in 121 DXCC entities. Approximately twenty
individual operators along with members of clubs, including
South Eastern Amateur Radio Group, Kerry Amateur Radio
Group and Limerick Radio Club, contributed to this
impressive total, and we are very grateful for their support.
The call sign remains active until the end of 2018, and any
licensed EI amateur radio operator who would like to
commemorate this historic centenary can request a slot. Call
sign usage is being coordinated by Dave EI6AL.

Robert EI5KH, Dave EI6AL, Joe EI7GY

Links:

RMS Leinster site	www.rmsleinster.com
National Maritime Museum	www.mariner.ie
Museum Station	ei0nmimi@mariner.ie
EI100MCV usage	dave.ei6al@gmail.com
Dragon Amateur Radio Club	www.dragonarc.org.uk

Editor's Note:

Ireland's National Maritime Museum is housed in Dun Laoghaire's
180-year-old Mariners Church, easily accessible by DART suburban
train and several bus services. The museum's greatest artefact is
probably the building itself as it is one of a few custom built places
of worship for seafarers remaining intact in the world to-day.

Experienced guides will bring you on a voyage of discovery
enthraling you with stories of discovery, heroism, war and disasters
at sea. You will learn about maritime history, exploration,
navigation, radio, deep-sea cable technology, nature, wildlife and
view art inspired by the sea.

See the 10-tonne revolving Baily Optic, immortalised in James
Joyce's Ulysses, try the electrified steam engine and pause to reflect
at the Titanic exhibit, the re-created radio room, the Royal Navy
prisoners docks and the war memorial. Try sailors' knots, learn how
they lift heavy weights, be photographed with the pirate, research in
the library, visit the shop and much more.



7Q7EI Malawi 2018

Enda Broderick EI2II & Pat O'Connor EI9HX



The EIDX Group was formed in January 2016, and consisted originally of Irish amateurs. Since then we have expanded, and today our membership is twenty-eight paid-up members, consisting of Irish, English, French, & German DXers.

The group today is growing, and is open to anyone who is interested in working DX, or maybe looking to travel with a DXpedition team to sought-after countries.

Our first Dxpediton, to 9N7EI Nepal in March 2017, was a major success where we logged more than 30,000 QSOs. Shortly after returning, our minds were turned to choosing our next DXpedition, as all of the Nepal group were anxious and ready to go again in 2018.

Choosing a new DX country is not as straightforward as one might think, the group had to keep in mind and consider the following.

1. It had to be affordable.
2. Possible to get an operating license.
3. It would need to be well positioned in the most wanted, Club Log rankings
4. Have stable 220-volt electricity, and with generator backup.
5. Comfortable accommodation, and with a nice warm climate.
6. Easy fly in and out to the destination.
7. Have ample room to erect multiple antennas.
8. Most importantly – somewhere relatively safe!

After a couple of months of searching and deliberation, the group leaders fixed their sights on Malawi 7Q, as it ticked all of the above boxes.

So in October 2017, the DXpedition country for 2018 was formally tabled at a meeting in Portlaoise where a slide show in PowerPoint was presented to all, showing the location, hotel selected, cost, and all the other necessary details required for a person to consider signing up to take part.

A little introduction to Malawi 7Q

Malawi is located on the east side of Africa, south of the equator, and is one of the smallest countries, area 118,484 sq. km of which 20% is taken up with Lake Malawi. For comparison, Ireland's area is 84,421 sq. Km.

Population 18.09 million (Ireland 4.773 million)
GDP \$22 billion in 2017 (Ireland \$294 billion)

Malawi got its independence from the United Kingdom on the 6th of July 1964, and it's easy to see that the English left their print firmly on the country, with right-hand-drive cars and buses, road signage all in English, and so on it goes. The common language is English, but they also have seven local languages, with "Chichewa" being the national.

A team of fourteen was soon compiled and consisted of the following EIDXG members:

DJ7JC, EI2II, EI2JD, EI2KM/F8FUA, EI4BZ, EI4GZB, EI4HH, EI5GM, EI9FBB, EI9HQ, EI9HX, F5JTV, F5VHQ and MW0ZZK.

Each team member brought something to the team, and between us all a huge variation of skills was abundant. Many were seasoned Dxpeditors, experienced in managing intense pile-ups, while others were just being introduced into the fascinating world of DXpeditioning. An equal balance of SSB, CW and digital operators was present too with many having experience in the latest FT8 mode. We were the first DXpedition team to successfully use FT8 in 'Fox and Hound' mode and our presence/findings was instrumental to the development in this ground-breaking mode.

Our journey to Malawi began on the 22nd March 2018, with all meeting at Dublin Airport Terminal 1, where over 500kgs of luggage and equipment was collected, weighed, tagged, with two pieces of luggage allocated to each person for checking-in and carrying to Malawi.

The first leg of our flight was nine hours which took us to Addis Ababa Bole, Ethiopia International Airport, a four-hour stop over, and then a further four-hour flight to Lilongwe Airport Malawi.

After a tedious and nerve-wrecking experience with Malawi customs and emigration control, we now began a game of Tetris - shuffling both men and bags around the bus till we were fully loaded and could sit back and enjoy the beautiful five-hour trip to Annie's Lodge, Cape McClear. During the first few hours we had daylight and some amazing views of the country and a real look at the living conditions change as we went further from the capital. So too did the road, as by the time it was dark one would think it was a road in Connemara we were on with potholes the size of a bath tub.



The team at Dublin airport



Antenna layout

V1 80/160m Vertical, **V2** 40m Vertical, **V3** Multiband Vertical
H1 Hexbeam #1, **H2** Hexbeam #2
VDA 15m VDA, **SB** WARC Spiderbeam, **RX** R/X Beverage

By 19:30 we had reached our destination.

Cape McClear is a small town on the southern shore of Lake Malawi, and is part of the National Park. In fact, our location was indeed situated right in the midst of a UNESCO world-heritage site! In 1859 the missionary and explorer David Livingstone found the Cape, and named "Cape McClear" after his friend, the astronomer Thomas McClear, who was Queen Victoria's Astronomer at the Cape of Good Hope.

As part of the DXpedition, we had planned to take part in the WPX SSB Contest, but arriving at our hotel on the 23rd at 19:00, with the WPX contest starting at midnight, left little time to prepare, and we did not have the daylight we thought we would have had. But after a quick late supper, the team got busy setting up the stations and antennas.

Construction by torch-light was the only option but determination prevailed and by midnight we had a Hex Beam in the air and ready to call CQ WPX

The following morning at first light, the installation of the remaining antennas went into full swing, prioritising what was needed to keep the contest station operating and making best use of the space we had available. When finished we had two Hex Beams 20-10m, a WARC Spider Beam for 30,17 & 12m, a vertical for 80 & 160m, VDA 15m, vertical 40 & 10m and a Beverage for the Low Bands. The Cape McClear location was fantastic for antenna installation, as all the beams were located on the beach of Lake Malawi. The only antenna not in the sand was the 80 / 160m vertical.

Our operating station design

Learning from our past experience meant we couldn't trust conditions to be predictable and each operating point would have to be ready to adopt whatever mode was open at the time. In planning for this we decided to split the shack into zones with designated stations by band so as to reduce the amount of antenna and filter swapping, each station had to be set up to run all modes and changeover needed to be simple.

At the core of our operating points was the Icom IC-7300, a simple lightweight rig with all the elements we needed,

especially the single interface cable giving rig control, keyer and sound card functionality. The ability to restore predefined configs made changeover between SSB/CW and FT8 a simple task. To help with our band presence we used the Acom 1010 amp again, this was sticking with our weight budget and operating-simplicity in mind. This year we invested in some high-power filters, learning from our past experience these proved invaluable.

Each operating point had a Windows 7 laptop running on a wireless network with one master point for central log and cluster access. This master laptop also maintained a timesync for the FT8, something we did have difficulty with as our internet access was sporadic and some (time) drift crept in when we were off-line for a few days.

To reduce the amount of steps required when changing modes the following plan was hatched. Our choice for DXpedition SSB/CW was to use Wintest. As a familiar platform for all the operators using it all week would be most efficient option. To reduce changeover time and avoid log contamination we ran N1MM+ for the CQ WPX contest. N1MM+ was also used throughout the DXpedition for all the digital modes with an easy RTTY interface and central log facility for FT8 stations included. Other utilities such as Hamcap were also used on each station for band predictions. All of the logs were uploaded and sent to our QSL manager Charles M00XO periodically where an internet connection allowed for inclusion in Club Log.

The five operating points were all colour coded, stating which antenna connected, and what bands covered. The colour code on the operating station matched the operating schedule colour, prepared and posted on the walls adjacent to the operating positions.

Red Station: 160m, 80m vertical & Hex Beam 1, 20-10m.
 Blue Station: Hex Beam 2, 20-10m & 80m dipole.
 Green Station: Spider Beam 12, 17 & 30m.
 Orange Station: Multi-band vertical, 10 & 12m
 Yellow Station: Vertical 40m & 15m VDA.

An azimuthal map for our location in Malawi was used, and generated courtesy of Tom NS6T.

Setting up and operating a DXpedition station from a third-world country comes with its own challenges and our biggest one was of course a stable electrical supply.

Malawi generates only 80% of the electricity required to run the country, so on a daily and nightly basis, without warning there are power cuts throughout the country, our experience was as many as twelve to fourteen times daily, these cuts could last from five minutes to five hours, so it was nearly impossible to get a good run at building numbers. As soon as the power was restored, all the systems would have to be reset and synchronised, internet connection restarted, laptop USB ports re-established, amplifiers warming up all took time while we watched the delightful comments on the cluster

suspecting we had gone QRT for the day. The hotel did have a generator but that was only for extreme emergencies and our requests to run the generator on a permanent basis were dismissed due to the high cost.

After days trying, we did source in a near town, a portable generator with great expectations, but when connected it only gave us 180 volts and not sufficient to run the equipment.

As mentioned above, the frequent power outages also caused major problems to the internet providers - we only had a connection when it suited them.

The weather forecasters in Malawi are very accurate, with predictions a month or so in advance, but into our second week, with all five stations running flat out, and plenty of QSOs being logged, out of the blue a mini-tornado came in across the lake, took down two of the antennas and threw the large WARC Spider Beam up into nearby trees, breaking three of the fibre-glass spreaders and getting completely tangled. It took until the following evening (24 hours later) before the spreaders were repaired with epoxy resin and the beams back up again.

The food supplied by the hotel was of good quality and with good choices, three meals per day, breakfast at 08:00, lunch at 14:00 and dinner at 20:00, the lunches & dinners were ordered a day in advance, as to give the hotel time to source our selections, but unfortunately some of our ops got the dreaded stomach bugs, with one being confined to bed for three days.

On all DXpeditions, there are two sides, the unfortunate I have already outlined, but on the good side, which without doubt over weighed the bad items, are the following:

Our location was top class, the hotel property had a beach front to the lake, with a fantastic take-off all round over the water, from 300 deg to 120 deg.

When we had electricity, our equipment worked flawlessly and was a pleasure to operate.

The pile-ups were fantastic when propagation was favourable, which let the operators live their dream and experience real pile-ups.

With good propagation and good runs going, it was a joy to watch the master logging station clocking up the QSOs collected from our five stations.

Taking part in the WPX SSB contest was a bonus.

Support from fellow EIs was great - 86 different EIs made it into the log for a total of almost 400 QSOs.

The weather was very good, with the temperature daily in the thirtys. We had a swimming pool in the garden, and if you wanted you could have a swim in the lake.

The hotel was fantastic. The rooms were spotless, serviced daily, and equipped with fridge, tea making facilities, air conditioning, and the hottest water that ever came out of a shower. The hotel staff were friendly and went out of their way to help us.

With a local audience of kids on the beach all day, every trip to turn the beam was an adventure - they had carvings to sell or a song to sing if it would relieve you of a few dollars. Even to our amusement the odd "C  ad M  le F  ilte" was heard once they found out we were Irish.

What we took back from the trip.

With the best planning in the world, you cannot control the day to day situations that may occur, like the loss of electricity, internet, bad propagation, poor quality of operators calling without listening, storms brewing without any notice, sickness tummy bugs etc, so it's best just to get on and concentrate with what can be controlled.

To conclude, the above is a short description and summary of events which took place on our DXpedition to Malawi, and we all thoroughly enjoyed the trip, and cannot wait for the next one.

The EIDX Group would like to thank all our sponsors and to those who supported us on this our second group DXpedition.

Sincere thanks to IRTS for their generosity and support. It's great to have the support of our National Society behind us.

We made over 37,000 QSOs and we worked 154 DXCC entities; see breakdowns on next page.

We entered a score of over 3 million points in the CQ WPX SSB contest and just as going to print, we received our #1 in Malawi certificate! In fact, not only were we also #1 in Africa, but we even set a new African record!



The team on their last night in 7Q

Total QSO breakdown

Band	CW	FT8	SSB	RTTY	Total	Total %
160	7	230	0	0	237	0.6%
80	330	317	0	0	647	1.7%
40	1525	619	743	378	3265	8.8%
30	2180	272	0	125	2577	6.9%
20	4683	412	2723	341	8159	22.0%
17	2148	165	5616	259	8188	22.1%
15	2922	217	4220	364	7723	20.8%
12	1968	11	1362	251	3592	9.7%
10	1187	13	1362	130	2692	7.3%
Totals	16950	2256	16026	1848	37080	

DXCC by Band/Mode breakdown

	CW	FT8	SSB	RTTY	Total
160	4	36	0	0	37
80	42	41	0	0	50
40	68	52	56	49	85
30	77	27	0	24	79
20	89	49	94	26	111
17	79	27	116	24	122
15	92	28	106	36	117
12	74	0	72	7	87
10	63	2	61	19	76
Totals	117	65	138	67	154

Total QSO breakdown by Continent

Continent	Total QSOs	%
Africa	410	1.1
Asia	2840	7.7
Europe	29180	78.7
North America	4213	11.4
Oceania	106	0.3
South America	331	0.9
Totals	37080	100.0

Well, what's next for the EIDX Group?

- 'DX Féile' weekend on Inishmore, Aran Islands has become a firm favourite, nationally and internationally with delegates visiting this year from Norway, USA, Scotland, Wales, Finland, England, France, Germany and of course all four corners of EI. The uniqueness of this DX Convention and its location on EU-006 is a major attraction. See www.dxfeile.ie for more information.
- Our *Irish Islands IOTA Tour* has seen huge interest amongst IOTA chasers worldwide and to date we've netted well over 20,000 QSOs. A project like this has never been done before in EI and to activate all IOTA groups in one season has received great publicity. We had three stations QRV during DX Féile - more on this to follow in a forthcoming issue of Echo Ireland.
- Promoting the Group and amateur radio as a whole to encouraging DX activity throughout Ireland.
- Have a presence at most EI rallies and events.
- Planning continues for our next DXpedition in 2019 and will be announced shortly.

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Thanks to: AB3CV, DK2YL, DL7BA, DL8RB, E1627, E12CN, E14CF, E14GK, E14KE, E15JQ, E17BA, E17CC, E17GY, F4GYM, F8FKI, GW4ZAR, HB9BEM, HB9DEN, IK2TDM, IK2WSQ, IZ0NRG, JA0ELB, JA1BK, JA2QXP, JA5EXW, JA6GPR, JH1URT, JH1MNT, JK1KSB, K0PC, K1CP, K5GS, K7UC, K8ZH, K0ARM, K0FLY, KE9L, KG9Z, KK4OKKK4OW, LA7THA, N4II, N7NR, N7RC, NA3CT, NH6Y, NU0F, NU1B, OE8RT, OH2MQ, PA2LO, RG2A, VA3SB, W1TC, W3HVV, W3KK, W3YQ, W4ASE, W6RS, W6SZN, WA2TPU ...

The EI DX Group would like to thank the management and staff of Annie's Lodge, Cape Maclear, for making our stay so comfortable and for aiding us to reach our goals. With over 37,000 QSOs in the log, we like to think that we've given many a new band / mode slot / ATNO. Thanks to all who called us and for the huge pile-ups.

QSL via M00XO QORS - your card is not needed. TRX. 130610 0000

7Q7EI QSL card



HF Happenings (and more)

Don Brennan EI6IL

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Hello again from the shack of EI6IL. It's time again to review the last few months on the bands. The bands of late have been rocking from time to time. FT8 is now a big player and by far the most popular digital mode. It is here to stay and is certainly making a huge impact on the bands and now being used on most DXpeditions.

There are pros and cons to using FT8 on DXpeditions. The fantastic thing is that it brings, for the first time, objective signal reports to the hobby. We all know that '59' is a nonsense, but in the more 'manual' modes, we don't have anything better. Using actual, genuine, signal-to-noise measurements for signal reports allows more meaningful comparisons of equipment, antenna performance and propagation research.

On the upside, it is clearly a very popular HF mode, good for weak signal DXing even for stations limited to low power and basic antennas. It can make even short openings and marginal paths productive. On the downside, the maximum QSO rate with WSJT-X is about 60 QSOs per hour per transmitter. In practice, experienced digimode DXers (such as Roly P29RR) can sustain about 50 QSOs per hour, provided they have the ability to concentrate intently on the screen and cope with the occasional need for repeats and the sequence-out-ofs. QRM and contention for bandwidth would probably reduce the rate still further for very rare and popular DX. In comparison, a competitive CW, SSB or RTTY op on a good station can sustain a rate of 200+ QSOs per hour, maybe 250 or more for a similar level of operator effort - so that's potentially four or five times as many DXpedition QSOs per hour using legacy modes.

Having said that, FT8 can be fully automated, replacing operator effort with CPU cycles and clever programming. Futuristic DXpeditioners taking robotic fully-automated and self-contained FT8 stations with them, to sit silently in the corner making QSOs for the duration of the trip and perhaps beyond (ruggedised solar-powered FT8 robots with satellite links could potentially be left behind when the team leaves, perhaps with weather station or environmental monitoring capabilities to justify their existence). With suitable custom programming, it is feasible to generate and transmit multiple FT8 signals simultaneously, allowing for multiple QSOs in parallel. As to whether that would be a sensible approach, I will simply say that the challenge of working very rare DX is a large part of the allure of DXCC: making DX less rare and DXCC easier is not necessarily a worthwhile objective. Would Sir Edmund have agreed to carving off the top few thousand toughest feet of Everest, or installing a walkway to the summit, complete with safety handrail, oxygen bottles and warning signs?

Came across the Democratic Rep. of East Timor **4W6VA** cq'ing on 40m FT8. The big pileup didn't deter me from trying so I shifted my transmit frequency up the band to find a clear spot on the waterfall. Nailed him within a few mins so happy with new DXCC on 40m digital.

The official name of East Timor is the Democratic Republic of Timor-Leste. The country gained independence on May 20, 2002. The entire area of this island-country is spread over 15,410 square kilometers. The highest peak in Timor-Lest is Mount Ramelau which is also known as Mount Tatamailau at 2963 m.

The official languages are Portuguese and Tetum while English and Indonesian are the working ones. Timor-Leste has a tropical monsoon climate. The wet season is from Dec to April and the dry season is from May to Nov. Temperatures vary between

15°C in the mountain areas and 30°C on the northern and eastern coast. Majority of the people are Roman Catholics, followed by Protestants, Muslims, Hindus and Buddhists. Their natural resources are gold, petroleum, natural gas, manganese and marble. They export coffee, sandalwood, marble and import food gasoline, kerosene and machinery. They import food, gasoline, kerosene and machinery. The country gained its independence on May 20, 2002 when it became the first new sovereign state of the twenty-first century. Industries in Timor-Leste are printing, soap manufacturing, handicrafts and woven cloth. Their main agriculture is mainly cassava, coffee, rice and maize. Their major trading partner is Indonesia.

Conditions were good towards end of August working **BG8NJJ** (China) and **PR7AB** (Brazil) at 22:15z on 7.074 MHz FT8. Shifted frequency down to 3.574 MHz and worked Argentinian station **LU2DX** and the Island of Fernando de Noronha **PU0FDN** at 23:00z.

Went on the pooch for the Pacific on 20m and ended up with **KL7/KT7WW** in Alaska and **E51JD** on the South Cook Islands at 06:20z on 14.260 MHz. The band was a bit dry for DX so as usual the bandscope was busy on 14.074 MHz FT8. I worked **NH7U** barefoot at 07:07z.

The DX Feile crew were active again this time on Inis Mór on the Aran Islands. This is considered a safe island with friendly natives! Logged **EJODXG** on 7.060 CW, 50.314 FT8, 10.104 MHz CW. Logged the Island Hoppers on 80m ssb with 50 watts as they were almost full-scale deflection on my 80m Inv V which is cut in at 3.510MHz. Great to hear all the EI's making it into the log.

Yet again EI were doing the business all across HF/VHF. It's a pleasure to work our "professional amateurs" flyin the flag for EI and a point to note is the calmness the EI DX Group bring to the bands showing great control over the pileups.

Late night operating brought Colombian station **HK1MW** and **HK0RMR** on 14.026 MHz CW following immediately by **W6PU** in New Mexico.

I had been on the lookout and tried several times to work **Z21MH** on 80m FT8 without success. Delighted to log them for a new country on 3.574 MHz at 22:29z with only 50 watts.

Turned my attention to 40m SSB and answered **HJ2MAP** on his CQ call at 23:04z

Started out early and joined a huge pileup for **RX0F** on Sakhalin Island AS-019. It's a good hop and a skip to this location.

Sakhalin Island is an island at the far eastern end of Russia. It is located between the Tatar Strait and the Sea of Okhotsk, North of the Japanese island of Hokkaido. Sakhalin was first settled by Japanese fishermen. In 1853 the first Russians entered the northern part. By an agreement of 1855, Russia and Japan shared control of the island, but in 1875 Russia acquired all Sakhalin in exchange for the Kurils. The island soon gained notoriety as a Russian penal colony.

Sakhalin Island is 948 km long from north to south and about 160 km wide, covering 76,400 square km. There is a lowland plain in the north, but most of the land is mountainous, reaching an elevation of 1,609 m at Mount Lopatin. Vegetation ranges from tundra and stunted forests of birch and willow in the north



to dense deciduous forest in the south. Fishing, mainly of crab, herring, cod, and salmon, is the principal economic activity around the coast.

Petroleum and natural-gas extraction in the north, coal mining, and lumbering, including paper production, are the basis of the rest of the economy. The main agricultural activity is livestock raising. Most of the population is Russian; there has been considerable emigration since the 1960s. The major settlement on the island is Yuzhno-Sakhalinsk, which is the administrative centre for Sakhalin *oblast*. On May 28, 1995, a major earthquake struck the island, destroying the town of Neftegorsk and killing some 2,000 persons.

Early morning logged **VR2XMT**, **4S7VG**, **5A1AL** and **S01WS** on 17m FT8; worked **9K2BS** from Kuwait who always has a tremendous signal on 40m ssb; logged the special event station **YB73RI/2** Central Java and Special District of Yogyakarta on 20m RTTY.

Worked Declan **EI6FR/P** on 20m CW from his SOTA trip to EI/IE-014, he had a good signal giving him a 559 for his efforts. It was also Lighthouses On The Air weekend so I was delighted to work the Carndonagh amateur radio club in Donegal **EI0CAR** on 20m SSB. Look the call up on QRZ.com as it's a brilliant account of the Donegal lighthouses with some absolutely stunning video clips and photographs. I took the above photo on a recent visit to Malin Head which is a very fine example of the WW2 coastal warning signs which were constructed to alert aircraft that they were flying over neutral Ireland.

Logged another station **RA0FF** on Sakhalinsk Island IOTA AS-018. Severe QSB was noted on his 20m CW and also some polar flutter.

I use Logger32 as my main logging software and it can be configured alert users of new ATNO's etc. It highlighted to me that I hadn't worked Monaco (**3A**) on 10m so I quickly went to the spotted 10m frequency and before long got **3A2NL** for a new DXCC on that band.

Logged the very rare Island of Ildidlya AS-065 with callsign **RT65KI**. Quickly fired up the radio on 20m and got them into the log within a few mins. The calculated QTF or bearing for the Island was 354.2° N from EI but Declan **EI6FR** had done his homework and advised on approx. 30° NE. I took a listen on both paths and they were definitely stronger on the skew path of 30° NE. It is always advisable to check the direction of your antenna and don't be afraid to go +/- of the logging programs calculated directions.

Got lucky and logged another IOTA this time due South of EI off the coast of South Africa callsign **ZS9V** on AF-064 which is just to the North of Cape Town.

This island is famous as it housed the prison where Nelson Mandela was held for eighteen of his twenty-seven years in

captivity. Robben Island is about six miles off the coast across a freezing stretch of wild water inhabited by great white sharks. The reason to go to this melancholy isle is not for its rabbits, penguins or springbok. Not even for its stunning views of Table Mountain. It is to experience an emotional encounter with South Africa's iron-fisted past.

The Finnish Lighthouse Society (FLS) and Amateur Radio League of Finland (SRAL) in conjunction with OH-DX-Foundation (OHDXF) and the DX University (DXU) organised a first-ever International Youth At Sea (IYAS) cultural-exchange-based radio activity. This first-ever IYAS was observed by several international ham organisations and is a candidate for a permanent annual event.

Market Reef was alive again with "Youth on the Air" which is an activation of young operators participating in daily workshops of safety and survival at sea in the remote lighthouse. In addition, they became familiar with the latest digital modes and most important, learning how to operate radios efficiently: Their instructors are those Market veterans: Martti **OH2BH**, Henri **OH3JR** and Pasi **OH3WS**

I was looking for the UK led Dxpediton to the Austral Islands callsign **TX5T** at the end of August. I listened on and off for a few days and could only hear a very light signal on 20m CW which wasn't needed as I had already worked **TX5T** from 15m to 30m on CW during Feb 2017. I was only really interested in the higher bands or 80m.

Kosovo continues to rock on the bands working **Z68HZ** on 40m SSB. The pileups continue to be large with this entity in big demand from certain corners of the globe.

Here are a few stations that I worked throughout the month of August.....

20m SSB - **ZY159CAT**, **RX0F**, **PP5DZ**, **LU1YT**, **HI8RD**, **YB73RI/1**, **HK4L**, **EI0CAR**, **PP5IP**, **V47FWX**, **S79LD**, **OJ0C**, **WP4EHK**, **RT65KI**, **EJ0DXG**, **CE7VPQ**, **HK3JCL**, **E20WXA**, **KL7/KC1XX**, **Z64EEF**, **VU3ESV**, **PY6HD**.

20m CW - **PP8ZAC**, **BA4MY**, **BG8NKX**, **EI0DXG**, **EI6FR/P** (Sota), **RA0FF**, **VE7/DL8UI**, **9Z4Y**, **PY0F/PY7RP**, **VO1III**, **RA0FF** (AS-018)

40m SSB - **EI0DXG**, **VK2RI**, **HI8RD**, **9K2BS**, **Z68HZ**, **TM64YL**, **7Z1IS**, **CY1R**

40m CW - **N3RS**, **E20HHK**, **R2FAQ**, **EJ0DXG**, **4W6VA**, **BG9NJY**, **PR7AB**, **XT2BR**

September brought the usual early morning 20m CW contacts from Japan. My experience is that an elaborate radio system and antennas are **NOT** needed to work JA on 20m CW/FT8. To prove the point I worked **J11LET** on 20m CW with 100 watts at 07:49z using my vintage Yaesu FT101zd and wire dipole slung across the hedge. It took about 20 mins but got there in the end.

I then fired up the 3-el Steppir and Yaesu FT5000 logging thirty-eight JA stations. I decided to get out of dodge as I would grow old and greyer filling out QSL cards to JA. I mostly acknowledge now with LOTW but I QSL direct if I receive a card in the post.

I shifted to SSB and logged another few JA's. **UN7QF** shouted in from Kazakhstan for a rubber stamp 59 followed by **BA7QT** in Southeast China. Bagged lots of JA and worked the JTDXA contest team using callsign **JUIDX** on 14.247 Mhz @ 07:50z.

Delighted to log the special callsign **EI100MCV** which commemorates the sinking of the Royal Mail Ship (RMS) Leinster on 10th Oct 1918. (*Ed: see the article in this edition of Echo Ireland*)

Plenty of contest stations on the first weekend of Sept. so dipped into 20m SSB and logged **XR208C** (Chile), **HS5SRH** (Thailand), **A61ZX** (UAE), **BI4SSB** (China), **E2A** (Thailand), **J11LET** (Japan), **PY5PLL** (Brazil). This is a handy way of getting the DXCC count up in a short space of time. Many contest stations have very good transmit and receive antennas. and are happy to get a point or two from anyone.

If you want to practice your morse then keep an ear out for Brian Otter from Zambia callsign **9J2BO**. He doesn't do rubber stamp 599 QSOs, and changes his speed to suit the operator he works.

September also brought Neil **V73NS** out of the woodwork and I logged him on 14.029 MHz at 08:20z. With conditions a little down due to the sunspot cycle a beam or high wires would probably be needed to work the far away DX although never say never and the only way to know what is on the bands is by getting on.

EX0PL (Kyrgyzstan) is always about the bands and is good for LOTW confirmation.

Another big DX'er with many awards is **YB1AR** Yana in Bandung Indonesia. Logged him barefoot on 14.220 MHz (14:15z).

Logged **KP4TF** (NA-099) on 14.005 MHz at 11:55z; I saw a few spots for **T32AZ** and hunted the entity for about a week when I logged them on 14.228 MHz SSB (07:32z).

Most spring and autumn weekends I am active on the radio towards the end of the greyline and like to be on the radio at sunrise. This time can land some nice fish particularly on the low bands if the DX station shares the greyline with EI.

Some more 20m DX logged during Sept were **V26K** (Antigua & Barbuda NA-100), **V44KAO** (St. Christopher & Nevis NA-104), **TO40CDXC** (Martinique NA-107).

Antarctica never lets us down and I had been waiting quite a while for **RI1ANL** on 40m when I logged them on 7.001 MHz 20:27z. **ZW8T** (Brazil) called me and we QSY'ed up a few Khz's to complete a QSO. Turned the VFO and worked the DXpedition to Bhutan **A5A** on 7.028 MHz. This DXpedition had a few legends onboard like Zorro **JH1AJT**, Lin **DUI1ST**, **E21EIC** Champ, **OH2BH** Martti and **DJ9ZB** Franz. These men have been around the block and are very relaxed on the microphone and the key.

September brought us our first storm of the year Alle which brought gusts of up to 120km/hr. Its always a nerve-racking experience for radio experimenters with outdoor structures and antennas. Stormy weather events appear to be more frequent and

violent of late. I took a quick look at my own antenna farm firstly nesting and then tilting the mast.

No damage to report post-storm, but lost electricity for the guts of a day. In the interim I fired up my trustee Yaesu FT-857 on a solar charged car battery. I had a barefoot evening and made contacts to the southernmost end of Chile logging **XR208C** on 20m CW. Also logged **8Z88ND** which was a special event station from the Kingdom of Saudi Arabia celebrating the 88th National Day of the Unification of the Kingdom.

Still on battery power I logged Martinique station NA-107 **FM5FJ** on 40m CW with 50 watts on the inverted V.

Mid September brought the **RI0B** IOTA Arctic Legend DXpedition a Russian team which conducted an important DXpedition to several very rare Arctic Russian islands, of course valid for the IOTA award, but also very interesting for those who love DXing, given their exotic position. On the first days of their trip, they were active from the boat as **RT9K/MM**.

Activity from AS-068 was cancelled as the main generator failed during the end of the last day in AS-104. Only 100W was used. They moved from AS-104 to AS-087, skipping AS-068 for lack of time. Their vessel had to be back in Saint Petersburg by October 7 before the floodgates were closed

RI0B was a callsign that was already used in 2001, with one of the first IOTA DXpeditions in that area, especially after the fall of Communism. That DXpedition was famous for a fascinating video, "Lost Island". Worth noting, some operators of the current DXpedition had also participated in 2001 trip. I was happy enough to work RI0B on 9 slots.

It's a matter of personal taste, but I am intrigued by those places in the far North and East parts of Russia, very remote and with very scarce human presence. Some of these islets, except for a few military settlements during the Communist era, have seen fewer people than certain DXCC entities like Bouvet or Peter Island.

The operators brought a lot of equipment, K3, TS-590, solid state amplifiers, a beam antenna and it was possible to hear them on the air without problems.

Well known DXer Steve **G4EDG** using callsign **ZD9CW** went on a one-man DXpedition to the Island of Tristan de Cunha in the Southern Atlantic. It was apparent that his time on air was limited due to accommodation restrictions. I note that he got slammed on the cluster for his choice of frequencies and operating time. Easy for some people to sit back in their lucky armchair and post rubbish on the cluster. Steve was on the bands sometimes calling a halt to the pileups and looking for UK and EI. I finished up working **ZD9CW** from 40m to 15m on various bands and modes. Steve also likes to work the now nostalgic RTTY mode which is nice to hear on the bands.



A Czech DX team were also active as **TO6OK** from the Island of Mayotte from Sept 22nd to Oct 4th. This team did a great job with a wide range of equipment from Elecraft radios to Spiderbeams, Vertical Dipole Arrays (VDA), 40m 4-square, 160m vertical + capacitive hats and receive Beverages. I logged them on many band slots and note 20 EI ops in their online Club Log.

I was on the lookout for the Antarctic station **RI1ANL** on 17m and came across him on 17m cw (18.080MHz 14:45z). Landed Zimbabwe **Z21LV** on 15m ssb (21.240 MHz 14:53z) Within a few minutes logged Namibian station **V51WW** on 20m ssb (14.220 MHz 16:49z)

Kosovo was active on/off over the last few months with **Z68UR** popping up now and then satisfying the hunger of the US stations. It's not a great distance from EI and very workable as I worked **Z68UR** using a mobile whip from the back garden on 20m SSB (14.224 MHz 09:47z)

Elation is the only word that can describe the feeling of working a brand new DXCC **Macquarie Island** callsign **VK0AI** on the last day of September. Some of us have spent the last few months researching and working out the pattern of this station. The amateur radio community has had some disappointments to date as it continues to be quite difficult to work this station. I put a lot of time and energy into working this entity which paid off on a dull September morning. From previous months it was noted that Norbert **VK0AI** was most active on Sat/Sun mornings using FT8 and starting out at approx. 04:00.

On Saturday 29th September I missed a few early calls from Declan to later find out that **VK0AI** was touch and go on 30m FT8. Down low too slow. I missed the boat so the following morning I got up at 04:30z and switched on the equipment. He usually starts on 20m FT8 and QSY's to 30m at about 06:00z. I saw him spotted on the cluster for 20m but it was too early in the dark hours with nothing but the middle east on my screen. I had also been on the lookout for **9X0T** on 80m CW so took the opportunity with ease and stuck him in the log. I QSY'ed to 30m, left the equipment switched on and headed back to the hay. I rose again at 07:30z and noticed **VK0AI** had a weak signal strength on the short path. I swung the beam around too the long path and immediately saw **VK0AI** averaging at about -12dB. I gave a few calls and jumped out of my seat when he gave me a call. I knew I wasn't out of the woods till I got an acknowledgement and, sure enough, I got stepped on by the world. I stuck with it and thankfully Norbert had the patience to see out the QSO. Norbert is an excellent QSL'er and I had acknowledgement on eQSL within three minutes and LOTW within a few hours.

New eQSLs							
LIMITS==>	Call Sign	Date/Time	Band	Mode	Country	AG	Signal Report and Comments
UNPLAY	VK0AI	30Sep2018 07:45	30M FT8	MACQUARIE ISL	Y	-06	Archive
UNPLAY	VK0AI	30Sep2018 07:48	30M FT8	MACQUARIE ISL	Y	-03	Archive



With the SFI hovering around 69 and a K index of 1 the bands were in reasonably good conditions with early morning 20m bringing the usual crew from Asia/Oceania and Japan flying in and workable on a mobile whip with 100 watts CW.

I was on the hunt during October for **E6Y** so got up one morning at 05:00z to try them on 40m but unfortunately not a peep. I heard but not needed **V73NS** on 14.005MHz. **E6Y** was spotted on 10.131MHz fox and hound mode but the signal was +14 from a SE heading so I suspected Fake News! Doing a quick sniff around the bands I heard **ZD9CW** loud and proud on 18.080MHz CW but again not needed. Although the magic propagation numbers weren't conducive to good radio conditions it turned out to be an immense day on the radio hearing and working all continents on CW/SSB+DIGI.

Stations logged were **5A0YL** in Libya on 14.185 MHz at 09:00z. Mid-morning also brought **9X9PJ** on 24.950 MHz. During the course of the day worked **EI10MCV** (20m cw), **DT8A** on the South Shetlands (12m FT8), **ZD9CW** (17m Rtty), **HK0RMR** at 20:00z (15m SSB), **8Q7PE** (40m cw), Cuban station **T45FM** (20m FT8), Guantanamo **KG4WV** also on 40m FT8 and a late night contact with **DP0GVN** down in the German Antarctic Research Station "Neumayer III" in Dronning Maud Land. I made a midnight contact with **DT8A** on the South Shetlands this time on 40m cw.

New DXpedition **VK9XG** (Christmas Island) was operational so worked them during the evening greyline on 7.026 Mhz and 10.120 Mhz CW within ten minutes.

I spun the dial across 20m CW portion and heard **NI6BB** on the retired battleship USS Iowa located in downtown Los Angeles. Gave him a couple of dit's and dah's but to no avail. I remember working them on 10m in the past with relative ease. It's still good to hear California and the West Coast during the propagation famine. Checkout their QRZ page to see the array of military antennas still in use. The main transmit antenna which covers 3.5 – 30 Mhz is a discone cage and is mounted on the bow.

Changed frequency to 17m CW portion and came across the big Hawaiian club station **KH7XS** on 18.075 MHz at 17:39z. I heard Hugh **EI2HI** exchanging a report with them during the magic greyline.

The Ducie Island team **VP6D** landed on the island Friday 19th October and spent most of the day setting up their equipment. I believe **EI4KF** and **EI6FR** were some of the first EI's in the 40m log on 20th Oct. Ducie had a very impressive signal well into Irish daylight. They went off the boil around lunchtime and for the remainder of the day.

Looking at things logically it appeared that the Irish greyline would be a good time to try Ducie on the lowbands. With that in mind I got up just before dawn and hammered the 40m key for a while. The station had a run on the USA, southern EU and the odd JA. No sign of G or EI making it through so decided to hang on until EU was well lit up in sunshine. Went back on the radio at 08:30 local time. Ducie had a tremendous signal so a few calls later and had them in the log. Delighted as this was an "all time new one" (ATNO) and well into brightness I could hear a big "Yee-hah" from the shack of Anthony **EI2KC** who nailed them on 40m.

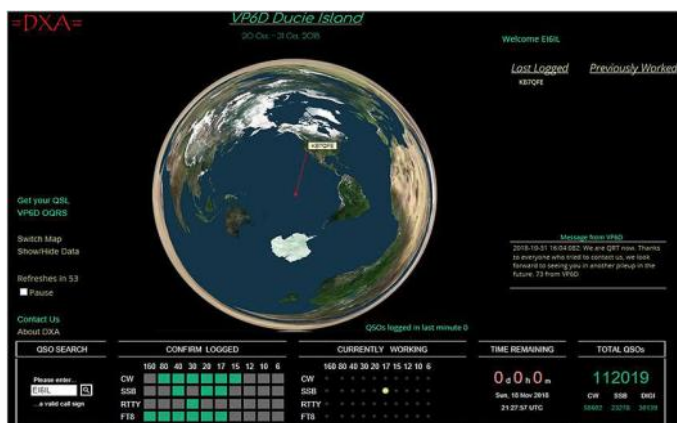
When all is said and done the DX hat goes off to Hugh **EI2HI** in the Republic of Cork as he worked Ducie with 100 watts on 12m CW using a Hexbeam at approx. 19:00. Now that's DX !!

The Ducie DXpedition setup DXA which is a dynamic website that allows DXers to view the current status and activities of the DXpedition in near-real-time. Within a minute or so after



making a contact the DXer is able to see confirmation of that contact entered in the expedition log. Information such as the callsigns logged in the last minute and in the last hour, and the band modes currently being worked are displayed in a simple, automatically-updated interface. The entire application runs within a standard browser - no software needs to be downloaded or installed.

The screenshot below shows my contact confirmed within minutes of the QSO, hence no need for repeats or insurance QSO which inevitably saves time. The DXpedition broke into two camps about 1km apart and suffered some network problems and led to some frustration but they kept the world appeased of their situation and assured people that the online log would have every call. Their Broadband Global Area Network worked OK for them allowing them to upload logs and updates.



I notice from time to time some confusion on the bands when multiple DXpeditions are on at the same time.

The most common problem is operators working the cluster spots and not listening to the DX before calling. It was quite evident in late September when Rwanda **9X0T/9X0Y** and **TO6OK** were sharing the spectrum.

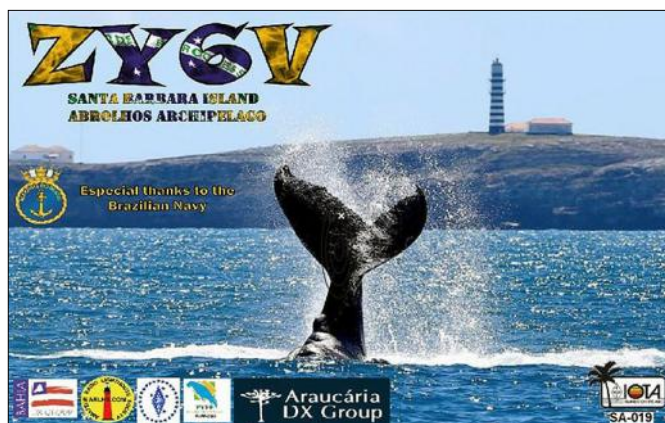
Logged **VK9XT** on 20m RTTY (15:53z) for a new digi slot. Worked them on a few slots and always good to see up to fifteen EIs in their log.

World class DXpeditioner Declan **EI6FR** has now turned some of his attention to Summits on the Air (SOTA) operating, and can be found on the bands quite regularly so keep an ear out for him as he conquers the Irish peaks during sometimes inclement conditions to give out the rare locations. If folks give up their time and energy then no harm in supporting them by calling in.

The nuclear ship Savannah was activated as a special event station callsign **K3S** during late October and had massive pileups on the go.

It's a long story but Chad had a brief activation by Ken **LA7GIA**. He ran into some security issues and was eventually allowed on a plane home when the Norwegian embassy got involved. He made a few QSOs with **EI6FR** and **EI6IL** the only EIs who made it.

A taste of some more DX worked during October was **D44TWO** (Cape Verde) 160m @ 20:23z, **TT8KO** (Chad) 20m cw 21:29z, **XQ6CFX** (Chile) 21.022 MHz 17:57z, **T45FM** (Cuba) 14.008 MHz 20:53z, **5A0YL** (Libya) 14.185 MHz 10:25z, **9X9PJ** (Rwanda) 24.950 MHz 10:42z, **DT8A** (South Shetland Islands AN-010) 24.916 MHz FT8 17:02 + 21.074 MHz FT8 15:53z, **DP0GVN** (Antarctica) 14.024 MHz 20:01z + 10.110 MHz 22:45z, **VK9/JK7LXU** (Norfolk Island) 10.136 MHz FT8 09:43z, **ZP5DA** (Paraguay) 21.282 MHz 15:59z, **8Q7PE** (Maldives AS-013) 10.106MHz 19:09z, **VK9XG** (Christmas Island OC-002) 7.026 MHz 16:49z / 10.124 MHz 17:03z / 3.526 MHz 22:39z, **KH7XS** (Big Island Contest Club Hawaiian Islands) 18.075 MHz 17:39z, **YJ0GC** (Vanuatu) 10.105 MHz / 14.016 MHz, **ZL7X** (Chatham Island 10.141MHz FT8 07:57z, **T88SM** (Palau) 14.038 MHz 11:01z, P40T (Aruba) 14.014 MHz 19:41z, **XT2SZZ** (Burkina Faso) 40/30/20/17+15m CW, **A52ZB** (Bhutan) 14.205 MHz 10:22z, **VP9/AA4V** (Bermuda NA-005) 10.115 MHz 12:31z, **9V1XX** (Singapore) 10.136 MHz 23:15z, **JT1BV** (Mongolia) 14.205 MHz 08:42z, **RI1ANW** (Antarctica) 3.573 MHz FT8 23:52z, **HS0ZLP** (Thailand) 21.245 MHz 10:40z, **5R8UP** 3.501 MHz 23:08z, **8P9AE** (Barbados Island NA-021 160m to 15m inclusive. **9M2TO** (West Malaysia) 10.138 MHz FT8 11:54z, **NP2J** 1.821 MHz 22:33z, **EP6RRC** (Shiff Island New Iota off Iran AS-189) 40m/30m+17m cw, **ZY6V** (Abrolhos Island SA-019) 7.170 MHz 07:09z.



Our dedicated DXer Dave **EI9FBB** hopped on a plane and activated a brand new IOTA Vieques Island NA-249P. Logged him on 20/30/40m. Thank you Dave, another fine one man mini DXpedition with plenty of EI interest.

Dave had a quick stopover in Dublin Airport and travelled onwards to Kosovo where himself and Jeremy **EI5GM** lit up the bands. Worked them both a few times here and there and often left the VFO on listening to them working plenty of EI.

The Mediterraneo Dx Club International Team travelled to Zimbabwe recently and the entity got roasted with RF. Logged them on 22 slots to keep the shack warm.

After a big chase I finally nailed **E6Y** (Niue Island OC-040) 14.023 MHz 18:07z. This was one worth waiting for. Only thirteen ops made it into their log from Ireland and the UK.

Time to wrap up now until after Christmas so I would like to wish everyone and their families a very Happy Christmas and may the DX Santa fill your log with wild and wonderful contacts from the far reaches of the planet.

73 de **EI6 In Louth**

November		DXpedition Calendar				
2018 Nov25	2018 Dec02	East Timor	4W	LotW	TDDX 20181024	By DS3EXX as 4W/DS3EXX fm IOTA OC-148; HF; QSL also OK via DS3EXX
2018 Nov26	2018 Dec03	East Timor	4W	HL1AHS	DXNews 20181026	By HL1AHS as 4W/HL1AHS; HF; SSB CW FT8
2018 Nov26	2018 Dec06	Nicaragua	YN	RZ3FW	DXNews 20180415	NA-013); 160-10m; CW SSB
2018 Nov28	2018 Dec07	St Martin	FS	See Web	TDDX 20180420	160 80m focus; will try to include FT8
2018 Nov30	2018 Dec10	Montserrat	VP2M	See Info	TDDX 20180822	160-6m; CW SSB PSK FT8 RTTY; QRV as multiop for ARRL 160m
December						
2018 Dec04	2018 Dec18	French Polynesia	TX0A	Club Log	DXNews 20181014	IOTA OC-113) (activated last 28 years ago) and TX0M fm Morane Atoll (IOTA OC-297P)
2018 Dec05	2018 Dec11	East Kiribati	T32NH	LotW	DXNews 20181015	IOTA OC-024); 160-6m; CW FT8
2018 Dec07	2018 Dec09	Senegal	6V1A	LotW	TDDX 20180917	AF-045
2018 Dec18	2019 Jan19	Vanuatu	YJ0AFU	LotW	TDDX 20180604	OC-035;
2018 Dec25	2018 Dec31	Mariana Is	KH0TG <small>NEW</small>	JL1UTS	TDDX 20181116	JL1UTS; 160-20m
2019						
January						
2019 Jan09	2019 Jan21	Sierra Leone	9LY1JM	TBA	DXW.Net 20181030	AF-037
2019 Jan12	2019 Jan20	Cayman Is	ZF2PG	LotW	DXW.Net 20180305	K8PGJ
2019 Jan18	2019 Feb14	Rwanda	9X2AW	M0OXO	TDDX 20181031	DF2WO
February						
2019 Feb11	2019 Feb25	St Kitts & Nevis	V47KA <small>NEW</small>	LotW	K1KA 20181115	160-10m, focus on FT8 (not Fox-Hound
2019 Feb11	2019 Feb26	Macao	XX9D	LotW	TDDX 20180829	XX9LT 160-6
2019 Feb16	2019 Feb22	El Salvador	YS1	KC0W Direct	KC0W 20181018	YS1/KC0W; 80-6m
2019 Feb16	2019 Mar05	Central Kiribati	T31EU	DL2AWG	PA3EWP 20181016	Canton

Z66X Kosovo on FT8

Ham Radio Kosovo has been a long-running project of Marti OH2BH. His work behind the scenes with the IARU, ITU, SHARK and local government has made operations like Z66X possible.

With our great hobby there is a corner of it to suit everybody, and the rise of FT8 has sparked a lot of new interest in both active and dormant operators. With all this band activity, it was proposed to try something different, and to give an FT8 DXpedition a go. When looking for operators, Martti's focus was now on Ireland and some of the members of 7Q7EI who earlier this year ran FT8 from Malawi. Declan EI9HQ and Enda EI2II were delighted to come on board and join Martti and other team members - Hans PB2T, Fehmi Z62FB and Driton Z61DX.

This was to be a two-week operation with Declan & Enda operating for the first week followed by the remaining team members for the second week. After a day of travelling, we were introduced to our new home for the week by Fehmi Z62FB. Our station setup was relatively quick as we had brought our pre-configured laptops and two Icom IC-7300s. The shack had already an Acom A1000 amplifier, good electricity and 20Mb/s internet access. Fehmi & Driton had a lot of work done on the antennas prior to our arrival so we were on the air in no time.



Z66X Operation position

think that we gave many DXers a new one on the magic band! Twenty-nine different DXCCs were worked on 6m, and in total we logged some 5,386 during our activation.

Advancements in Joe Taylor's WSJT-X software were noticeable since the EIDX Group's 7Q7EI operation where they operated on a beta version. With version 1.9.1 the full potential of DXmode was available. The split operation is essential and now the multi simultaneously response is a game changer. At our peak we had a run rate of over 210 QSOs per hour for over ninety minutes, mostly into JA. Like all things in ham radio, rarely does everything go according to plan and with anything new, there is a learning curve for everybody.

	FT8	SSB	CW	Total
80	25	0	0	25
40	59	0	0	59
30	56	0	0	56
20	70	27	2	73
17	36	0	0	36
15	41	0	0	41
12	34	0	0	34
10	22	0	0	22
6	29	0	0	29
Totals	87	27	2	88

DXCC By Band (courtesy of Club Log)



Driton Z61DX, Enda EI2II & Declan EI9HQ

The station was located on a small hilltop site in a residential area on the outskirts of the capital city, Pristina. Concerns over local interference in such a built-up environment were dispelled straight away as it was pleasantly noise-free on the bands.

Aloft a 30m tower we had a Force 12 XR6 beam which we used on 20m through 6m, at 10m there was a 5-element beam for 6m fixed on central Europe. At 22m an inverted V trap dipole for 80/40m and at 20m a sloping dipole for 30m. A further sloping dipole was added for 17m later. The site also hosts a number of fruit trees which provided the occasional nice snack! Our ambition was to operate as much 6m as conditions allowed as, little over a week previously, Kosovo was granted 6m privileges. As we had two operating positions, the second radio was our HF station. We like to

While a lot of operators are using FT8, not all are familiar with the Fox & Hound concept. This I'm sure has created some frustration for those calling for hours only to be missed by the split operation but, as we see it, it's a necessary part of working contacts at any significant rate. A downside of the DXmode process was of course operating on spot frequencies and the reluctance of stations to follow us. Our best example of this was on 40m where due to the larger gap between the normal FT8 operating frequency and our published spot, we did not get much participation - yet when we moved to standard mode and ran on the normal 40m FT8 frequency the pileup was so great very little got through and we were lucky to work 20 QSOs per hour! It's unfortunate that relying on the cluster or pscreporter only has become a common part of our hobby. As a result, many operators now, just do not monitor any other segments of the band!

Overall we were very happy with the operation. The station is a credit to the hard work put in by local operators Z62FB, Z61DX and friends forming the International Friendship Consortium, Z66X. They have now a permanent station available for serious operators looking to operate from Z6 without the hassle of getting equipment into the country or having to find a suitable DX-friendly QTH. Kosovo is still in high demand which is evident from our recent trip and I'm



Martti (OH2BH) and Declan EI9HQ

sure there is a lot more RF to come from this location in time to come. You can contact Fehmi, Z62FB or Martti, OH2BH for your dream to come true!

Note, we received the warmest of welcomes and enjoyed magnificent Kosovo hospitality - every success to Z66X - the International Friendship Consortium.

CQ WW SSB Contest 2018 at EI9E



*Photos by EI2JD - Upper : John EI2FG
Lower : Thos EI2JD, Billy EI7FJ, Mark EI6JK, John EI2FG
Left : 11-el Optibeam for 20, 15 & 10m*

New Spectrum - News

The IRTS band plans for 5m and 8m were published in the autumn edition of Echo Ireland. The plans are subject to continual review as information becomes available regarding equipment for use around 40MHz and 60 MHz and potential operations in these bands.

As a result some small changes and editorial updates have been made to the following sub-bands:

40.400 – 40.660 MHz: The maximum bandwidth is now 20 kHz; reference to Image Frequency at 40.470 MHz has been deleted.

40.700 – 42.000 MHz: This sub-band now extends from 40.700 to 43.00 MHz with a maximum bandwidth of 20 kHz; added 42.000-43.000 simplex 12.5 kHz spacing and 42.500 FM calling frequency (12.5 kHz channel).

42.000 – 44.00 MHz: This sub-band now extends from 43.000 - 45.000 MHz.

54.000 – 56.000 MHz: Usage could be paired with 43-45 MHz (see 42-44 MHz above).

56.000 -58.000 MHz: The maximum bandwidth is now 20 kHz.

58.000 – 59.500 MHz: The maximum bandwidth is now 20 kHz; reference to Image Frequency at 58.550 MHz has been deleted.

The latest version (v3.0 at the time of writing) is available for download from www.irts.ie/downloads. It has been agreed by the IRTS Committee that the Band Plan will be submitted for ratification at the interim Vienna meeting of IARU in 2019.

The IRTS Radio News Bulletin on Sunday 28th October 2018 reported that Phil EI9KP (ON4TA) is back in Ireland and that, following tests with Dominic EI9JS, he is now fully QRV on the 40 MHz 8m band with a converted FT 857 on CW, SSB and FM. He has constructed some dipoles and a delta loop for the band and is keen for some more contacts either two-way or cross band. On the 21 October a QSO took place between Tim EI4GNB and Dave EI3IO on the 12.5 kHz FM calling channel 42.500 MHz using Dragon SY-5430 transceivers.

Both EI3IO and EI4GNB are also equipped with 40.00-42.00 MHz transverters. More news will follow on equipment for the new bands. However, it is worth noting that during discussions with Icom Europe to ascertain whether the Icom 7300 could be safely used on 5m and 8m, Icom warned that the 7300 could be damaged if operated between 30 and 70 MHz and any warranty in force jeopardised. Transverters therefore seem to be the way to proceed.

Dave EI3IO

IRTS Committee Meetings

Meetings are generally held on Saturday, starting at 11.00 and finishing at 1300.

Club Representatives are invited to attend.

Forthcoming Meetings

Saturday **8th Dec** 11am Creggan Court Hotel, Athlone
Saturday **26th Jan** 11am Maldron Hotel, Portlaoise
Saturday **2nd March** 11am Creggan Court Hotel, Athlone

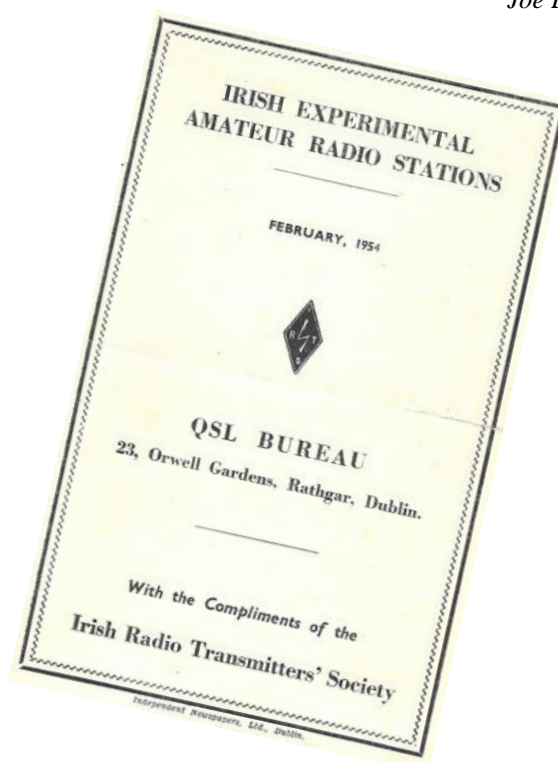
The Call Book post-GDPR

We addressed the question of the General Data Protection Regulation (GDPR) in the summer edition of Echo Ireland, where we reported that a review group, with the help of a solicitor, had looked at the implications for IRTS of the new Regulation. One initial recommendation of the review group was to cease publication of a call book, at least in the short term. This recommendation was discussed and agreed by the society's committee in May.

Since the initial review, we have had an opportunity to look in detail at the requirements to produce a GDPR-compliant call book. To do this we would need to have documented and verifiable consent from everyone listed in the call book – even if only the call sign was to be listed (as a call sign could be regarded as *personal data*). We could attempt to seek this consent from our members, but this would have to be done manually, using the postal system for requesting and receiving consent; (our membership records system is PC-based and not capable of handling an online verifiable consent process). At best, and with a significant amount of administrative work – initially and ongoing – we might be in a position to publish and maintain a list consisting of *some* of our members. As the national society representing the entire amateur community, it might be seen as inappropriate to publish a call book confined to members only.

In the light of these issues the review group concluded that it is no longer practical for IRTS to produce a call book. This was discussed at the September committee meeting, and the committee concurred with the review group's conclusions. It was acknowledged that this will disappoint many members. Most active members will have their contact details on QRZ.COM, which provides an ideal opt-in platform for whatever personal and other data a call sign holder wants to make public. Those with QRZ.COM entries are advised to check that their data is up to date.

Joe EI7GY



Call Book cover from 1954: things were a lot simpler then



Contest News

Joe Ryan EI7GY

contestmanager@irts.ie

IRTS Contest Results (award winners are on page 40)

SSB Field Day (1st & 2nd September)

Our SSB Field Day is part of IARU Region 1 Field Day, which runs in a number of European countries. This year, five EI field day stations took part – the same level of participation as in recent years. Band conditions were particularly disappointing, with no activity on 10m and 15m. In fact, 40m was the main band used by EIs – even 20m was poor.

Region 1 Field Day participation varies around Europe: support in Germany is very strong – with 129 portable stations on the air. 39 portable stations from the UK entered the contest, and 17 from Switzerland. There was also good support from Belgium and Denmark. The few EI stations on the air were in good demand as multipliers.

Three EI clubs took part: Avondhu Radio Club and Tipperary Amateur Radio Group entered the 24-hour Open Section, while Shannon Basin Radio Club were in the 6-hour Restricted Section. There were two solo entries in the 6-hour Restricted Section, including Justin EI3CTB who was running just 5W.

Autumn VHF/UHF Counties Contests

We have run a 2 metres Autumn Counties Contest at the end of August for many years, with quite low levels of support, possibly because we were competing with family holidays. We decided therefore to switch to September for this contest. Also, following the successful trial of a 70cms contest for the hour prior to the 2 metres event in Easter 2017, we decided to add in a 70cms contest ahead of the 2 metres Autumn event.

70cms Counties Contest (9th September 2018)

33 EI and GI stations in 19 counties participated in this contest, 19 stations submitted logs. Not surprisingly, portable stations on mountaintop locations had the best QSO totals. Most contesters used simple vertical antennas for this contest, very few EI operators have high-gain antennas for 70cms. This contest works well as a ‘warm-up act’ for the 2 metres event, and many participants welcome the opportunity that it provides to test UHF propagation. Contesting is not universally popular among radio amateurs, but on the VHF and UHF bands in particular, contest activity offers a unique window of opportunity for antenna and propagation experiments.

2 metres Counties Contest (9th September 2018)

71 EI and GI stations in 26 counties were logged during this contest (all counties except Cavan, Donegal, Fermanagh, Galway, Leitrim and Monaghan were on the air) as well as stations in England, Scotland and Wales. 25 logs were submitted – the highest number of logs submitted in recent years for the Autumn 2 metres contest. While well-sited portable stations performed well, their dominance was not as noteworthy as it was in the 70cms event.

40 metres Counties Contest (15th October 2018)

Local propagation was reasonably good for the early part of

this contest, but deteriorated rapidly after that as the skip lengthened. Excluding ‘uniques’, 51 EI and GI stations appeared in the logs, along with 85 overseas stations. Strong support from overseas stations – particularly those in England and Wales – helps to make this contest viable. 42 station logs with 1,393 QSOs were submitted. We were able to cross-check 834 QSOs (60%). 24 EI/GI counties and 16 DXCC entities were logged, these are listed on the results page on the web site.

I was /P in the Slieve Blooms, running 100W. I could hear numerous stations that couldn’t hear me, confirming my suspicion that 40 metres is particularly badly affected by man-made RF noise. Other portable stations active on the day included Mayo Radio Experimenters Network on the Mayo hills, and Albert EI6KO who was on Djouce Mountain, in County Wicklow, which he tells us was “... a very busy summit with a lot of people coming over to the tent for a chat.”

Logs Received and Processed

In the three IRTS contests during September and October we received logs in eight different formats as well as four paper logs. The non-Cabrillo logs we receive are re-formatted manually so that they can be entered into the QSO checking database. We acknowledge receipt by email of all logs received. To provide further assurance that a contest log has been accepted, we now publish at www.irts.ie/logs a list of “Contest Logs Received and Processed”, which is updated from time to time during the two weeks allowed for log submission.

Compliance with Contest Rules

All competitive sports have rules for ensuring fairness among the participants, typically enforced by referees or umpires through direct observation. Such direct observation is rarely feasible with amateur radio contests, therefore we rely largely on the honesty of contest participants to ensure the fairness expected in any competitive sport. I have been involved in amateur radio contesting in Ireland for the past thirty years, and I am satisfied that the majority of local contesters abide by the rules. Most of the infringements I have spotted have been inadvertent.

Unfortunately, in the past twelve months, I have come across two instances of serious rule infringements in IRTS contests that can hardly have been inadvertent; in both cases, the operators were self-spotting – which to my knowledge is not permitted in any contest; asking to be spotted is also outlawed. Both stations in question were penalised by a reduction in QSO points. (I should mention that in the recent 40 metres Counties Contest, two contesters submitted logs with QSOs outside the permitted frequencies but the submitters highlighted these errors, a good example of how to correctly deal with inadvertent rule infringements.)

Some contests have “assisted” sections that permit the use of the cluster (but not for self-spotting) along with “non-assisted” sections for those who prefer to operate with cluster assistance. We don’t have sufficient numbers entering our

contests to justify such separate sections so, with just one exception, use of the cluster is not permitted in any IRTS contest. The one exception is VHF/UHF Field Day, where cluster use is permitted in all sections, in recognition of the fact that the cluster is commonly accepted and used in VHF/UHF contests. So, for the Counties Contests and the HF Field Days, please stay away from the cluster!

We have a small contesting community in EI and I would ask everyone to abide by both the *letter* and the *spirit* of the rules. Neither I nor the IRTS committee want to be involved in making judgements about the seriousness of rule infringements, and we do not have the resources to 'police' the bands during contests.

UK/EI DX Contests

The only DX contest with EI and GI counties as multipliers is run by the United Kingdom and Ireland Contest Club (UKEICC). They run two 24-hour DX contests every year, an SSB event in September and a CW event in March. Multipliers are UK and EI two-character "District Codes" (which in the case of EI and GI are the counties) plus DXCC entities. For the SSB contest on 22nd/23rd September support from UK and EI stations was disappointing – 42 UK stations and 8 EI stations took part, along with 170 stations from further afield. Band conditions were poor on the day, which didn't help.

UKEICC also runs short contests every month from September through to April, excluding December. These 80 metres evening contests are good fun, the exchange is simply the four-character Grid locator (e.g. IO63, IO64, etc.), no RST or serial, and scoring is distance-based. The contests run from 20:00 to 21:00 UTC on the first Wednesday (SSB) and last Wednesday (CW) of the month, logs must be uploaded by 22:00 UTC, and results are available about an hour later.

2019 Contest Calendar

The calendar for next year at www.irts.ie/contests shows nine short Counties Contests plus the three 24-hour IARU Region 1 Field Day contests – similar to 2018. Contests provide a good opportunity to learn about propagation on different bands; clubs and other groups use contests to enable beginners to experience the fun of setting up and operating a station. The Counties Contests, which involve mostly local stations, can be an enjoyable way to meet up with old friends. By accepting logs in any format, including paper, we are trying to encourage "non-contesters" to try out these short contests.

Forthcoming IRTS Contests

80m Counties – Tue 1st January 15:00 UTC (2 hours)

80m Evening Counties – Tue 19th February 20:00 UTC (1 hour)

Links

Contest rules & calendar: www.irts.ie/contests
 Contest results: www.irts.ie/results
 UKEICC contests www.ukaicc.com



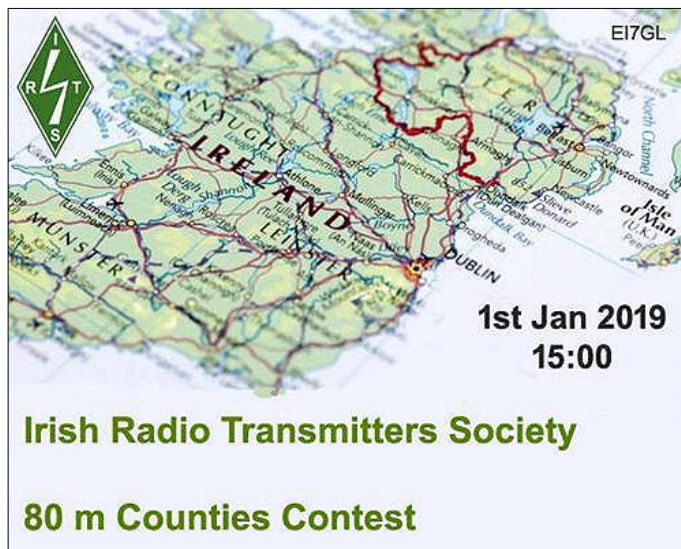
EI1E/P - Avondhu Radio Club's shack for SSB Field Day



EI7MRE/P - Dominic EI9JS and Jimmy EI2GCB at the 40m Counties Contest



EI6KO/P - Albert on Lugnaquilla for the 70cms / 2m Counties Contests



Contest News (contd)

Award Winners—IRTS Contests

SSB Field Day (1st/2nd September 2018)

Open Section	EI1E/P, Avondhu Radio Club (ops: EI4KH EI5KF EI7HMB)
Restricted Section / 6 hours	EI3Z/P, Shannon Basin Radio Club (ops: EI3FW EI4CF EI4GGB EI4HCB EI6GGB EI6IB EI8IU EI9HQB EI9HX)

70cm Counties Contest (9th September 2018)

SSB/FM High Power Portable (EI)	EI7GY/P, Joe Ryan
SSB/FM Low Power Portable - max. 10W (Outside EI)	GIØAZB/P, Ian Evans
SSB/FM High Power Fixed (EI)	EI2HI, Hugh O Donnell
FM Only - Single Op. (EI)	EI8JA/P, John McCarthy

2 Metres Counties Contest (9th September 2018)

SSB/FM High Power Portable (EI)	EI2SBC/P, Shannon Basin Radio Club (ops: EI3FW EI6IB EI8IU)
SSB/FM Low Power Portable - max. 10W (EI)	EI6KO/P, Albert White
SSB/FM Low Power Portable - max. 10W (Outside EI)	GIØAZB/P, Ian Evans
SSB/FM High Power Fixed (Outside EI)	MIØRRE, Robert Rantin
SSB/FM High Power Fixed (EI)	EI2HI, Hugh O Donnell
SSB/FM Low Power Fixed - max. 10W (EI)	EI3ENB, Paul Norris
FM Only - Single Op. (EI)	EI8JA/P, John McCarthy

40 Metres Counties Contest (14th October 2018)

SSB Only Fixed, EI/GI Stations	EI8CE, Aidan McGrath
SSB Only Portable - 100W max, EI/GI Stations	EI2WRC/P, South Eastern Amateur Radio Group (ops: EI6GVB EI7IS)
SSB/CW Fixed, EI/GI Stations	EI5KF, Gerard Scannell
SSB/CW Portable - 100W max, EI/GI Stations	EI5KJ/P, Keith Crittenden
SSB Only, Outside EI/GI	MØNCG, Mark Dumbleton
SSB/CW, Outside EI/GI	G4EBK, George Smith

News from the Clubs and Contest Participation

We welcome contributions from individual members and clubs affiliated to IRTS telling us about their activities. We particularly welcome items accompanied by clear, crisp, photos, together with separate captions identifying everyone. Submission Guidelines are on the back of this edition of *Echo Ireland*.

EI DXCC Single Band Status as at 26th November 2018

Compiled by Joe Ryan EI7GY

		160	80	40	30	20	17	15	12	10	6	2
10	EI2GLB	160	80	40	30	20	17	15	12	10	6	
10	EI2JD	160	80	40	30	20	17	15	12	10	6	
10	EI3IO	160	80	40	30	20	17	15	12	10	6	
10	EI6FR	160	80	40	30	20	17	15	12	10	6	
10	EI7BA	160	80	40	30	20	17	15	12	10	6	
10	EI9FBB	160	80	40	30	20	17	15	12	10	6	
9	EI6IZ	160	80	40	30	20	17	15	12	10		
8	EI7GY		80	40	30	20	17	15	12	10		
8	EI8IU		80	40	30	20	17	15	12	10		
8	EI9FVB		80	40	30	20	17	15	12	10		
7	EI1DG			40	30	20	17	15	12	10		
7	EI4BZ		80	40	30	20	17	15	10			
7	EI8GS		80	40		20	17	15	12	10		
6	EI3CTB			40	30	20	17	15	10			
6	EI7JZ			40		20	17	15	12	10		
6	EI9HX			40		20	17	15	12	10		
5	EI4CF			40		20	17	15	10			
5	EI4GJB					20	17	15	12	10		
5	EI4HH					20	17	15	12	10		
5	EI6AL					20	17	15	12	10		
5	EI6JK		40			20		15	12	10		
5	EI9E		80	40		20		15	10			
5	EI9GLB					20	17	15	12	10		
5	EI9JF		40	30		20	17	15				
4	EI3GV					20	17	15	10			
3	EI4GK					20		15	10			
3	EI4GNB					20		15	10			
3	EI5EV					20		15	10			
3	EI6FM					20		15	10			
3	EI6HB					20		15	10			
3	EI7GL		40						10	6		
3	EI8JX		40			20		15				
3	EI9HQ					20		15	10			
2	EI2II					20			10			
2	EI4DQ									6	2	
2	EI5IF					20		15				
2	EI7IG					20		15				
2	EI7JN					20		15				
2	EI8IQ					20		15				
2	EI9CN					20		15				
1	EI3EBB									6		
1	EI3HA					20						
1	EI5FQB					20						
1	EI5GSB					20						
1	EI6GI					20						
1	EI6S		80									
1	EI9CJ									10		
		160	80	40	30	20	17	15	12	10	6	2

IRTS QSL Service

Special Event Call Signs

The outwards and inwards QSL service is available free to IRTS members, whether individuals or clubs, for their own call and for special event stations licensed to them.

The service is also available free to JOTA stations, irrespective of whether an IRTS member is the licence holder.

Operators of special-event stations should supply details to the relevant incoming QSL Manager listed on www.irts.ie and on the inside front cover of *Echo Ireland*

Entries in Bold Type show changes since 26th August 2018

The following Silent Keys were holders of DXCC Awards

DXCC Honor Roll

Mixed		CW	
336	EI8H/365	109	EI4HM

331 EI2GS/34

	DXCC	338	EI2GS
Mixed		300	EI8AU
365	EI8H	116	EI6CPB
340	EI2GS	114	EI4EX
116	EI6CPB	105	EI1CS

Seán Nolan EI7CD

Honorary Vice-President IRTS SK

An appreciation by Gerry Gervin EI8CC

It is with a sense of deep sadness and loss that I pen this appreciation of the life of the late Seán Nolan EI7CD.

Séamus EI8BP, our editor, asked me to recall in words for our readers the part that Seán played in bringing amateur radio to where it is today and to describe the enormous role he played in developing our National Society. I felt that to do justice to all that he has done such an account would not be complete without a deeper insight into his life and a glimpse of the way he influenced the lives of others, not just in the amateur radio sphere but in his life more generally. It is against this backdrop that I appreciate the indulgence of the editor in allowing me to present a more comprehensive account than we might normally present in such circumstances.

It is not that I have lost a great amateur colleague but I have also lost a very close and truly valued family member. Seán, who was an only child, was born on the 29th of April 1936. He grew up in Maynooth and it was there that he developed his life-long love of, and dedication to, the hobby of amateur radio. He often recalled how, at the age of ten or eleven years, he heard his parents and many others around Maynooth speak about the man in the village who was able to talk to people in New York and other places around the world on the radio he had in his house. That radio amateur was J. A. Browne EI7M, who was the manager of the Munster and Leinster Bank in Maynooth. Seán described to me how he often visited Jimmy's shack and was absolutely fascinated by the huge array of equipment there and the many antennas used to make those contacts with fellow radio amateurs all around the world. Those visits sparked a curiosity then, and subsequently a great enthusiasm, for all the intriguing aspects of our hobby.

He joined the Society in 1963 and received the SWL number EI153. I first came to know Seán in the mid 1960's when he appeared from time to time in my home in the company of my late sister Betty. As a very young teenager I had no interest or concern around his intentions in relation to my sister but what did interest me were the stories he used to tell me about his radio hobby and the stations he listened to as an active SWL at that time. I visited Seán's home in Maynooth on a number of occasions and spent many hours in his shack there. He and his father, Steve, constructed a very neat shack from timber car cases and it housed an array of construction and test equipment with his Gelo G209 amateur bands receiver taking pride of place. He also had an avid interest in the progress of the OSCAR series of satellites. He recorded, on a small reel-to-reel tape recorder, many telemetry transmissions he had received on his G209 on 28 MHz.

Seán became the big brother I never had and a real friend and support to me from those early teen years. It was as a direct result of his influence and that support that I too became involved in our hobby and became an IRTS member. He was, equally, a loyal and supportive friend to so many in the amateur radio community and elsewhere throughout his life. There will remain many untold stories of his unstinting efforts



in helping many prospective and licensed amateurs pursue their hobby. Seán married Betty in 1966 and their first QTH was close to my home in Monkstown. Very soon after tying the knot he decided to acquire another licence! He wanted to upgrade his SWL status to that of licensed radio experimenter, as we were then described in legislation.

He attended the meetings which were held on a twice-weekly basis at the Society headquarters in 91 Lower Baggot Street in Dublin. At those meetings there were many lectures and demonstrations conducted with a view to preparing members for undertaking the regulations and theory examination of the Department of Posts and Telegraphs. Morse code training sessions were a regular feature also. Many of the prominent figures in the Society at the time such as Con EI9V, Ian EI6U, Tom EI9U, Tom EI9AH, Al EI9BC, Bill EI9F, Jim EI2BB, Roderick EI2P, Leo EI8BR and Pat EI7BM lent a hand in providing the classes and the Morse code sessions. Seán decided that some more intensive and focused training was required and went about organizing a class at his own QTH. He gathered a small group around him. He produced a set of notes as his course progressed and these were centred on the syllabus for the examination. He ensured that his students studied intently and as a result that little group all succeeded in passing the examination under his tutelage and the callsigns of EI7CD, EI7CC, EI8CC and EI1CH appeared on the air.

Seán's long-suffering XYL Betty played a pivotal role in this operation in providing tea and sandwiches every evening to the students. On occasions Betty's younger sister Mary made an unexpected entrance to provide support to Betty. There was an ulterior motive behind this which subsequently became apparent when Mary became XYL of EI7CC.

Having passed his morse code test in the Department's office in Hammam Buildings the EI7CD call sign was soon gracing the 40 and 20 metre bands. He had been constructing his home brew transmitter for a few months in anticipation of his long awaited first QSO. The old Geloso G209 was the station receiver and 40 and 20 metre dipoles with a common 75 Ohm twin feeder propagated the 25 watt signal.

His construction of his first transmitter was extraordinary to behold. As in everything he tackled he adopted a systematic and ordered approach to the job. The diagrams were intensely studied in detail. Components were laid out methodically before being precisely soldered in place. His construction of the chassis and panels was a labour of love. Seán's father was a huge influence on him when it came to working with his hands. Steve had a wonderful gift which manifest itself in his meticulous restoration of the works of old clocks of all shapes and sizes. In addition to his horological skills he restored the faces and cases of those old clocks to the point where they could not be distinguished from new. Seán certainly inherited that gift. In an interview on RTÉ radio many years ago with Freda Mc Gough, in which Seán described perfectly for listeners what amateur radio was all about, he told her about his first contact with his newly-constructed station as EI7CD. He said he was so nervous about coming on the air on CW to make his first contact that he arranged one with an amateur in Dun Laoghaire which was just down the road from his own QTH. That station was none other than EI7CC who as we now know subsequently married Betty's sister, thus demonstrating amateur radio can indeed be a family affair.

Seán's love of learning and his desire to instil that in others in the amateur radio community was to the forefront of his huge contribution to the furtherance of the hobby throughout his life. When he moved QTH to Cabra in the early 70's he became a leading figure in the Fingal Radio Club. Again, providing tuition to prospective amateurs at the meetings held in the Ballygall Road East Scout Hall where the club met weekly was something that was very important to him. Many new members down through the years received personal tuition from him, such was his determination to ensure that those who sought help got every chance to pass the examinations. That included a number of students with disabilities.

In 2009 Engineers Ireland promoted an activity they entitled 'A Week of Wonder' aimed at young people and the Society prepared a workshop, under the overall direction of Séamus EI8BP, as an introduction to communications and radio technology. It was a hands on experience for schoolchildren and teams constructed a breadboard audio oscillator to generate morse code. Seán was a key man in a team that enabled five hundred young people around the country to participate and build the oscillator. He brought his training skills to bear on a programme that proved a huge success in promoting the Society to a new generation.

His single biggest contribution to the development of the hobby lay in his negotiation of the contract with Comreg for the operation of the licence examination. He oversaw the running of examinations, usually on a twice yearly basis. With committee colleagues he prepared draft examination papers, based on the HAREC syllabus. He also played a central role in devising a course of tuition for prospective licencees which has been made available through the Society on various media. His natural inclination to serve others was reflected, not just in an amateur radio context, but also in his professional life. He was a dedicated civil servant throughout his working years. That life of public service began in the Department of Agriculture

where he enjoyed his early working years first in the office in Ennistymon and then on to Mullingar. It was there that he also enjoyed playing poker with the Dolan brothers, Joe and Ben, in the Greville Arms. Back in the Department's HQ he met Betty where they both worked in the area dealing with the bovine tuberculosis eradication scheme. It's not eradicated yet but that's not their fault! From there he moved to the Department of Education where he found a natural home to pursue his interest in training and development of young people. Bhí sé in ann a ghnó a dheanamh trí Bhearla nó Ghaeilge. He was a valued advisor to many Ministers who recognised his natural talent in both the practical aspects of teaching and the legislative framework that underpins it. Prior to his retirement he worked for a number of years on the European Union dimension in education and spent a lot of his time in Brussels. It's not surprising that two of his junior ops today pursue careers in key positions here in second and third level education.

Further in pursuit of his love of learning Seán instilled that very interest in all of his four junior ops. The other two pursued studies leading to medical careers. Those of us close to the family observed how Seán closely followed the courses and devoured the text books and the notes. We have no doubt that he himself could have passed all of the examinations with distinction. He acquired a diploma in legal studies after his retirement, a subject he always displayed a great aptitude for. His skills in this field were to be a tremendous asset to the Society over many years. When negotiating licensing with the Department and the subsequent licensing authorities Seán proved himself a formidable foe and won the genuine respect for his competence from officials such as Tom Kennington, Harry Cooke, Brian Millane and more recently Derek O'Reilly. In pursuit for example of the B licence and emergency communications capability he achieved successful outcomes through skilled negotiations around the use of the words 'may' or 'shall' in the legislation.

On the international front his contribution on behalf of the Society was recognized as being of immense value and importance to the development of the hobby. He was held in high esteem and that of course reflected very well on the standing of our National Society in the International Amateur Radio Union.

Seán was deeply interested in every aspect of amateur radio. A visitor to the shack would clearly see that he had a truly multifaceted approach to both operating and construction. In addition he made time to bring his considerable administrative skills to bear in providing support to the Society at committee level. This huge commitment was apparent to all who enjoyed the privilege of serving with him. He was nothing short of forthright in presenting views on topics which were important to him. His efforts probably constituted the greatest input by any one member over the Society's long history. During times of differences of opinion in relation to the status of the National Society *vis-à-vis* other amateur societies in the country he always managed to present the voice of sweet reason and common sense. He was instrumental in steering a course to a satisfactory and acceptable outcome with the unification of amateur radio representation in this country. He served in almost every committee and support role and held the Society Presidency with great distinction from 1977 to 1979.

However there is no doubt that Seán was first and foremost a real practitioner of the amateur radio service. He was very

active across a wide range of the bands allocated to us. He was a very competent CW operator but worked mainly on SSB. He experimented with satellite communications, HF dxing, VHF DXing, contesting and participated in many expeditions to such diverse places as Dalkey Island, Saltee Islands, US Virgin Islands, Saint Tudwal's Island and many more. Seán was also a central figure in many exhibition and commemorative stations such as the Young Scientist Exhibitions, the Marconi station in Dun Laoghaire mounted in 1998 to commemorate the first commercial use of radio in 1898 and another Marconi exhibition station in Clifden. He was a regular on the annual trip to Friedrichshafen and never came home without a new piece of gear or a bag of long-sought-after components.

In recent years his club involvement centred around South Dublin Radio Club. He attended weekly, built up close friendships with other members and was always willing to share his advice and considerable experience, particularly with newcomers.

Seán helped to establish The National Maritime Radio Club in the Maritime Museum in Dun Laoghaire. One of the main activities he helped to promote, in conjunction with Dave EI6AL, was the special event station EI100MCV activated throughout 2018. This station was mounted to mark the centenary year of the sinking of the RMS Leinster in the Irish Sea on 10th October 1918, just a month before the end of World War 1.

Through all this activity Seán was undoubtedly among the best known radio amateurs in the country. He was a central figure over many years in the production of the Society print media in its various forms. But it was probably through his long years of unstinting service to the Society Sunday morning radio news service that he was best known.

While amateur radio was the dominant interest in his life he had a number of others. He and Betty shared a love of music which included classical, light opera and traditional and, true to form, he went to painstaking lengths to assemble the right components with which to enjoy his listening. He had natural music ability and a wonderful singing voice. It might surprise many to learn that those of us who were fortunate to be in his company in family gatherings often enjoyed renditions by him of such songs as the Padraic Colum ballad 'She Moved through the Fair' or the very popular Pete St John's 'The Fields of Athenry'.

For a number of years he was a keen photographer and loved



A photograph of Kylemore Abbey taken by Seán

to capture scenes of beautiful landscapes and nature. When the children were young he and Betty often holidayed in Connemara where Betty had attended boarding school. He assembled great slide shows from these excursions with which he entertained us on many evenings. It was not just still photography though with which he was associated. In his young days in Maynooth he filled the very prestigious appointment of assistant projectionist for the showing of blockbusters to the local community in the hall in St Patrick's College.

He was interested in all sports and in later years decided to try his hand at golf. In typical fashion he decided that the correct approach was to first research the manuals for the game and then undergo a course of training. He did this with Billy Kinsella, the professional at Woodbrook. He continued to enjoy the game for a number of years and I enjoyed playing many rounds with him myself. It's clear that he could have successfully pursued any direction in life that he chose.

There is no doubt that he led a most complete life which was driven, on the one hand by his curiosity about everything and on the other by his love of both learning and teaching. Seán was also a deeply religious man and the main driving force within him was his devotion to his family and his wide circle of friends. He leaves behind his children Philip, Paul, Bláthnaid and Sinéad, his son in law John, his daughter in law Leonie and his grandchildren Rachel, Aoife, Daniel, Sam and Seán. His passing leaves us all suffering an incalculable loss.

Is cúis mhór bhróin dúinn nach bhfuil sé linn inniu agus is cinnte nach bhfeicimid a leithéid arís. Ar dheis Dé go raibh a anam dílis.



Seán Nolan EI7CD SK



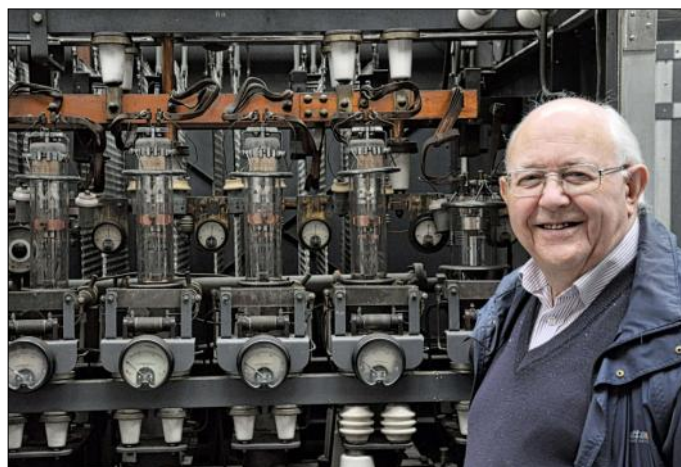
with Gerry EI8CC, Aidan EI8CE, Peter EI7CC



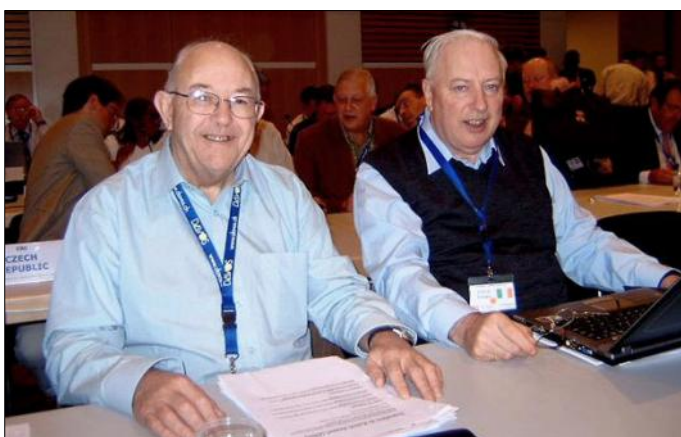
STEPS demonstration - February 2009



IARU Presentation at South Dublin Radio Club - 2009



The Marconi MW Transmitter at "Athlone" - 2015



IARU R1 Conference, Davos 2005 - with Finbarr EI1CS



Friedrichshafen 2007, with EI8BP, EI1CS, EI4GK



Alexander Davidson Patterson GI3KYP / EI4BC, known to all as Barney, could do anything — fix an airplane undercarriage or a washing machine, fit a new cylinder head or clutch, rewire the house - nothing was too difficult. He edited books for friends, he wrote poetry, he fixed clocks, he sorted computers for anyone who asked. There were ammeters, oscilloscopes, potentiometers, valves and transistors to build or repair TVs and transmitters. He was an interesting man to be around. And then there were the trains – not the Hornby OO models, but ones to pull people round tracks. His enthusiasm for life was infectious and he involved people in what he was doing.

Barney was born in Dublin in 1932 and lived in Truder, Co. Wicklow where his father was an estate manager. Later they moved to Delgany where his father ran Patterson's garage. He went to Newtownmountkennedy school where he was one of six pupils taught by a deaf teacher with whom they conversed by sign language. He studied at Trinity, the first of his family to go to university, and there he met his wife Anne – they married in 1958.

He was licensed as EI4BC, and on moving to Belfast he became GI3KYP. In 1967 he was President of RSGB, and in 1971/72 President of IRTS - the only person to have held both titles. He was unselfish and unstinting in his encouragement to newly-licensed amateurs, and introduced many to the pleasures of contesting, by operating through the night, in tents and with hand keys, in CW Field Days.

From 1956, Barney worked in the Guided Missile Division in Shorts, and developed terrain-following radar and missile tracking systems. He learned to fly and was a member of the Ulster Flying Club in Newtownards Co Down, and an examiner for the Private Pilots radio licence. While at the Club, he rebuilt and commissioned a Link Trainer, an early flight simulator that was a marvel of electromechanical and hydraulic components. He was a member of the Flying Hams Club from 1967 and its chairman in the 70s. His favourite plane was the Tiger Moth and he would have loved to own one.

Barney was instrumental in organising the EI/GI Conventions starting in 1964 at Ballymascanlon Hotel, just north of



Barney GI3KYP at home in Cyprus Avenue, Belfast, March 2017, with his fine collection of morse keys

Dundalk. It is recorded that, at the first Convention on 18th April 1964, some 200 people were seated for the evening's "Full Dinner and Entertainment" – price 22/6.

For twenty years, from 1973 to 1993, Barney was Chief Telecommunication Engineer for the Police Authority of Northern Ireland – a job that was not without risk. He travelled to police stations and hilltop aerial sites to inspect bomb damage and to ensure that radio communications were maintained throughout that time. He was a member of the Communications and Electronics Security Group during this period liaising with Police, Army, Fire and Ambulance

services. In recognition of his work he was honoured with an OBE in 1993. On retirement from the Police Authority he did consultancy work with the Garda and Irish Fire Brigade.

Barney lived a full and active life helping people whenever he could and whenever they asked. He died, peacefully, at home on 10th October 2018, surrounded by his family. He is missed by everyone who knew him.

Our sympathies go to Anne, and to his children Alec, Janet, Hilary and Claire — and our thanks to Alec for giving the details of Barney's life and career.



*EI/GI Convention, Ballymascanlon, October 1981
Back row - GI8AYZ, GI3USS, EI2I, G2AMV, EI8Z, GI3KYP, EI7CD
Front row - EI5DH, EI9V*

Jim Claffey EI2DDB SK

An appreciation by Dermot Miley EI2HD



The Dublin repeater area is just digesting the news of the passing of one of its best known amateurs Jim Claffey “EI2DDB” in July.

Jim, late of Sutton, Co. Dublin, was a regular station on the Dublin 2m repeater and on surrounding simplex frequencies over the years. He was a regular on the “roadrunner net” each morning and evening going to and from work

News is coming late to many in the amateur fraternity as Jim had been missing from 2m for a couple of years now. Enquiries as to Jim’s absence from the band would have been answered by stations reporting him being heard in contact with Ben EI8EQ in Malta on 15m, so no problems were anticipated.

Ben was one of his friends in a group that included Chris, a GW station his call sign “6VAG” who also has not being heard on the Dublin repeater for the past few years. Jim was widely known under his colloquial name “Double Diamond Bravo” and would

have worked most amateurs with his “Double Diamond” call.

Jim came to the amateur scene with his friend the late John EI8HI both from the CB Band and their interest in building antennas continued on the amateur bands where they had more frequencies and antennas to work with. They were prolific antenna builders and made some successful antennas working from an English Naval antenna book John acquired in his CB days.

Jim was a talented graphic art designer and worked with his own company in the Dublin 2 area. He frequently went to the canal harbor area at lunchtime and did charcoal and pencil sketches of the area, and judging by his sketch he showed me of Sean O’Casey, they would have been of high quality.

Jim would have been an amiable fellow and would have been welcomed into any group for an interesting conversation. He will be missed by many.

To his family and friends we pass on our sincere sympathies.

Ar dheis Dé go raibh a anam dílis.

Silent Key

**William Boles
EI1DK**



William was a keen radio experimenter for many decades and was heard regularly on the Dublin repeater. He was a pharmacist by profession and had managed Inchicore Pharmacy, formerly A.C. Boles, in Emmet Road, Dublin for over fifty years.

IRTS extends its deepest sympathies to his wife Myrtle, children Shirley, Alastair, Maurice, Hazel and Irene, his twelve grandchildren, two great-grandchildren, sisters Olive and Phyllis, brothers John and David, his extended family and his many friends.

May he rest in peace



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Coolmine Community School,

Dublin D15 FW 97

Contact Tony 087 243 9997

Limerick Radio Club

Annual Rally

Sunday, 10th March 2019

Doors open 10 a.m.

Radisson Blu Hotel & Spa,

Ennis Road, Limerick V94 YA2R

Contact Michael EI2IX

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5.2m